TELEPHONE 1852 NUMBER

THE CHEMIST AND DRUGGIST

TELEGRAPHIC ADDRESS CHEMICUS LONDON.

Chief Office: LONDON, 2 Cannon St. E.C.

Branch Offices: MELBOURNE and SYDNEY.

Established in

ENGLAND - 1859. AUSTRALASIA - 1885.

Registered as a Newspaper.] [Registered for Foreign Transmission.

Prix de l'abonnement:—The Chemist and Druggist une fois par semaine, et l'agenda du Chemist and Druggist une fois par an, 12.50 francs par an, franco.

Abonnementspreis: The Chemist and Druggist einmal wöchentlich, und Notizkalender des Chemist and Druggist einmal im Jahre, 10 Mark jährlich, frei in's Haus geliefert.

Precio de suscricion: The Chemist and Druggist, una vez por semana, y el Agenda del Chemist and Druggist una vez al año, 12.50 pesetas anuales franco.

No. 873. Vol. L. JANUARY 9, 1897.

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THE BEST NATURAL APERIENT WATER

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Carriage paid to any Railway Station in the United Kingdom.

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Allen & Hanburys Ltd.

Are now offering and will be happy to furnish samples and prices by return of post of the following lines now much in demand:—

Cod-Liver Oil.

The finest Norwegian Oil, manufactured at Allen & Hanburys' own factories at Longva and Kjerstad, Norway.

This Oil can be had in 25-gallon barrels as imported, in ½-gallon bottles, or put up in bottles of any size, and supplied with or without labels and cartons.

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The superiority of Allen & Hanburys' Malt Extract is vouchsafed in the valuable testimony of the leading Medical Journals, whilst the very large and constantly increasing demand is gratifying evidence that the care bestowed upon its manufacture is appreciated.

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Medicated Throat Pastilles.

In 1-lb. bottles, in 53 varieties.

Superior upright Showcases. Frames fitted with glass shelves, silvered glass backs, and lettered in gold.

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Exchange Column *Coloured Supplement.* Index to Advertisements, pp. 23 25

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Telegraphic Address—"BISMUTH LONDON."
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ESTABLISHED
OVER 60 YEARS.

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Agreeably with a recent intimation from Messrs. JOHNSON & SONS, 23 Cross Street, Finsbury, London, E.C., that they have entirely transferred their Cyanide Business to us, we take this opportunity of asking your notice to some of the other Articles which we manufacture, and shall esteem your enquiries.

CYANIDE OF POTASSIUM (JOHNSON'S QUALITY.)

NICKEL SALTS, ACIDS, AND ALL PLATING CHEMICALS.

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Refined Bells and M. & B Transparent Tablets.

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COLLODIONS, SULPHITE and CARBONATE of SODA and

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BATTERSEA, S.W.

NEAREST STATION,
OLD BATTERSEA STATION,
West London Extension Railway.

The Chemist & Druggist SUPPLEMENT

SATURDAY, JANUARY 9, 1897.

Businesses Wanted
Businesses for Disposal
Premises to Let
Auction Sales

ALSO EXCHANGE COLUMN.
For Bargains see the last page of this Supplement.

Partnerships
Situations Vacant
Situations Wanted
Miscellaneous

A Copy of this Supplement is inserted in every number issued of "The Chemist and Druggist."

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

VENDORS have the advantage of Messrs. O. & Co.'s direct attention and advice as to value without additional fee.

PURCHASERS are invited to forward a statement of their requirements, which will be notified in a register free of charge.

VALUATIONS having always been a prominent feature, Messrs. O. & Co. trust that the lengthened period during which they have enjoyed the confidence of the profession will be regarded as a sufficient proof of the sincerity of their endeavours to conduct these transactions in an honourable and straightforward manner.

1.—**£1,100.—LONDON, N.W. (Good-class Residential Locality).**—Dispensing and Retail Business; corner position; double-fronted shop, handsomely fitted; stock large and well selected; good house, held on long lease; further particulars on application.

2.—**£900.—LONDON (Residential Locality).**—Dispensing and Retail; all good-class business; returns, under manager, £900, can be largely increased by an energetic man; commodious residence, long lease; price about £750.

3.—**£650.—CITY (3 minutes from).**—Old-established Business, with good sale of own specialities; returns under manager £650 per annum; *net profit* £300; handsomely fitted shop and capital stock; good residence, on lease; valuation terms can be arranged.

4.—**£400.—LONDON, S.W.**—Old-established Business; returns present rate £400 yearly; the Business is situate in the main road; position good; very well appointed shop; capital premises, on lease; offer wanted.

5.—**£450.—LONDON (Main Road).**—Neglected Business; corner position; returns present rate £450; has returned £1,000 yearly; large house on lease; price about £300, or valuation can be arranged.

6.—**£500.—LONDON, E.**—Prescribing and Retail Business, chiefly ready-money; can be largely expanded by good Prescriber; returns £500 yearly, under management; valuation of stock and fixtures only required.

7.—**£1,000.—LONDON.**—Good-class Business, Retail and Dispensing, with select water trade, *all of profitable nature*; returns £1,000 yearly; price about £850; recommended.

8.—**£1,100.—CORNWALL.**—Old-established Business; no opposition in the Drug trade; returns over £1,100 yearly, *profits good*; well fitted shop and capital stock; price £550.

9.—**£750.—SOMERSET.**—Old-established Business, Retail and Dispensing; vendor retiring, having held it about 40 years; returns present rate £750; the shop is handsomely fitted and well stocked; valuation only required.

10.—**£600.—KENT.**—Old-established Business, situate in a very good position in one of the best towns; returns £600; select good trade, *all very profitable*; single-fronted shop, and ample working stock; good-sized house, with garden; price to be arranged; London references if wished.

11.—**£750.—NORTH OF ENGLAND.**—Retail and Dispensing Business, situate in large town, main thoroughfare; returns £750; handsomely-fitted shop and large stock; very superior house, bath-room, &c.; valuation about £750.

12.—**£1,100.—KENT (Market Town).**—Mixed Business; very old-established concern; returns £1,100; the shop is well fitted and stocked; good business premises, with garden; no stores in the town; price about £750, or valuation terms can be arranged.

13.—**£800.—SOMERSET (Central).**—Well-fitted Pharmacy, situate in the centre of a large market town; returns about £800; the business is the oldest in the district; valuation of stock and fixtures only required. Details on application.

14.—**£600.—BUCKS.**—General Retail Business, situate in good market town; returns, including small Branch, £600 yearly, can be largely extended; price about £460; offer wanted.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.
Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial attention of a London Agent.

SPECIAL NOTICE.—**Messrs. ORRIDGE & CO. have a large number of Businesses for Sale suitable for Gentlemen with Small Capital, from £200 to £500.**

ORRIDGE & CO., 32 LUDGATE HILL, LONDON, E.C.

PARTNERSHIPS.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond.

WANTED, a qualified Chemist as Partner. Anyone having £100 can communicate with A. Burt, 95 Aldersgate Street, London.

PARTNERSHIP (Junior) wanted in good Wholesale London firm; advertiser has £450, has sound knowledge of both Wholesale and Retail, and thoroughly experienced in all branches of Clerical work. All replies (with full particulars), which will be regarded in strict confidence, to "Namelock," 2 Bradstock Road, South Hackney, N.E.

TO LET.

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SHOP to Let, in main thoroughfare, suitable for Chemist; growing district; rent £35. Apply to J. H. Bethell, Estate Office, Upton Park, E.

TO the Dental Profession.—A firm of Chemists and Druggists having a large and varied connection, are prepared to Let the Upper Part of Business Premises, commanding an important position, to an established Dentist, and as the advertisers can influence certain business in conjunction with their other branches, this offers great facilities for the commencement of a high-class Dental establishment. For further particulars apply to Trythall, Auctioneer, Norwood Junction, S.E.

F. J. BRETT

VALUER,

37 Waterloo Street, LEICESTER.

References to Principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS.

NO CHARGE TO BUYERS.

£800 returns.—**LANCASHIRE.**—Old-established Business in large town; well-fitted and attractive shop; valuation about £500, or can be reduced to suit purchaser.

£630 returns.—**STAFFS.**—General Retail, in populous district; in same family 60 years; price £350.

£800.—**LONDON, E.**—Good-class General Retail; large and attractive shop; net profit £250; price £550.

£600 returns.—**SOMERSET.**—General Retail; when conducted personally never returned under £900; valuation £450.

£900 returns.—**LONDON.**—Light Retail Dispensing and good Specialities; net profit £300; price £800, value of stock and fixtures.

£460 returns.—**YORKS.**—Branch Retail, capable of much increase with personal attention; pushing young man with limited capital will find this a fine chance; price £150.

£550 returns.—**POTTERIES.**—Old-established Retail at good prices; illness sole cause of sale; fine corner shop and good house; price £450.

£1,150 returns.—**YORKS.**—Light Retail; under management; fine scope for energetic man who could give personal attention; valuation about £750.

£900 returns.—Good suburban Retail; rapidly growing residential district; net profit £300; price £575.

£800 returns.—**YORKS.**—Good position of large town; price £500 or valuation, one-half can remain for a time if desired.

WANTED, good-class Retail in Northern town; net profit £300.

WANTED, first-class Retail and Dispensing; lock-up shop not objected to; net profit £500 or over.

WANTED, good Business, returning about £1,000, where £600 or £700 can be invested.

BERDOE & CO.

CHEMISTS' TRANSFER AGENTS AND VALUERS,

35 JEWRY STREET, FENCHURCH STREET, E.C.

Established 1870.

VALUATIONS.

SPECIAL ATTENTION is paid to Valuations, which are personally conducted by a member of the firm, in any part of the United Kingdom. Our terms, which are moderate, may be had on application.

1.—**BEDFORDSHIRE.**—Old-established Family Retail, Dispensing, and Prescribing Business; returns £900; net profit £300; good house and garden; business can be increased; price £800.

2.—**SURREY.**—Good-class Light Retail and Dispensing Business; returns about £700; good profits; modern and convenient house; handsomely-fitted shop, well stocked; price £650.

3.—**MIDLANDS.**—Retail, Dispensing, and Prescribing Business; returns £800; net profit £300; low rent; good house; shop is well fitted and stocked; price £600 or offer.

4. **GLOUCESTERSHIRE.**—Unopposed Business, Light Retail and Prescribing; returns £700; rent £26, good house; shop is well fitted and stocked; price £450 or offer.

5.—**CAMBRIDGESHIRE.**—Retail and Prescribing Business; returns £400 as a branch; rent £30; must be sold at once, and first offer of £120 will secure it, less than valuation.

6. **LONDON (first-class suburb).**—Light Retail and Dispensing Business; returns £1,650; net profit £500; good house; owner retiring; good introduction; price £1,500.

NOTICE TO VENDORS.

Messrs. BERDOE & CO. desire to inform intending vendors that they have a number of clients unsuited desirous of purchasing for cash businesses in London, country, and at the seaside, returning £500 to £3,000.

Gentlemen placing businesses in our hands have the advantage of direct personal attention and over 26 years' practical experience, we being frequently enabled to sell a business to the first client we introduce, and without a single advertisement being necessary. Correspondence invited. Terms sent on application. Transfer and Valuation Offices,

35 JEWRY ST., FENCHURCH ST., CITY.

JUDD & MANNERS

(SUCCESSORS TO CROCKER & CO.)

Chemists' Valuers, Transfer Agents, & Accountants,

76 CANNON STREET, LONDON, E.C.

VALUATIONS made for Probate or Transfer by a fully qualified member of the firm. Books Audited, Balance Sheets Prepared and Chartered Accountants' Certificate given. Terms (moderate) on application.

BUCKS.—An old-established good-class Retail and Dispensing trade; returns nearly £800; very profitable; price £750, or offer; very handsome pharmacy and good house.

BURNLEY.—Branch Business for Sale; returns £400; price: valuation of stock and fixtures.

YORKSHIRE (Good Town).—Branch for Sale; returns £550; rent £70; price: valuation of stock and fixtures only; good bold premises, and plenty of scope for a pushing man.

MIDLANDS.—An old-established good-class Family and Dispensing trade; for many years in present hands; returns £1,000, very profitable; price £1,000 or offer; exceptionally good house and garden.

REGENT'S PARK.—An old-established Retail, Prescribing, and Dispensing trade; in same hands many years; returns £800; net profit £350; price £775; good old-fashioned Pharmacy; heavy stock; large and convenient house.

KENNINGTON, S.E.—Old-established Retail and Prescribing trade; returns £350; moderate rent; price £300; very few Patents sold.

WHITECHAPEL.—Very profitable Retail and Prescribing trade; returns £500; price £350; fine bold corner position and good house.

WEST LONDON SUBURB.—Good-class Retail and Dispensing; returns over £1,600; net profits about £500; price £1,500; splendid premises, in fine commanding position.

40 MILES FROM LONDON.—A good-class Retail and Dispensing trade: returns £750; price £700; good house, with modern conveniences.

FIRST-CLASS RESIDENTIAL SUBURB OF LONDON.—Good Dispensing and Retail Business, with nice house and Pharmacy; returning between £600 and £700, rapidly increasing; price £500.

NEAR LONDON.—Good middle-class Family trade, with excellent sale of own Proprietaries; returns £980 last year, and increasing; splendid opening for a Dentist; price £800, or offer; moderate rent, long lease, and very convenient residence, fitted with modern appointments.

MIDLANDS.—Pleasant market town; returns £650; price £600 or offer; good house at a moderate rental; nice garden, &c.

LONDON.—An old-established Wholesale Business, with valuable Specialities; capital required to purchase £6,000; all applications for particulars must give reference.

Full particulars of any of the above sent free on application.

VALUATIONS A SPECIALITY.

FERGUSON & OSBORNE

PHARMACEUTICAL CHEMISTS,

CHEMISTS' VALUERS AND TRANSFER AGENTS.

25 YEARS' PRACTICAL EXPERIENCE.

NO CHARGE TO PURCHASERS.

All VALUATIONS and STOCKTAKINGS are conducted personally by the Principals. Terms on application.

1.—**PROPRIETARY ARTICLE.**—Old-established; extensive sale home and colonial; price £2,500.

2.—**LONDON, S.E.**—Prescribing Retail; good house and garden; net profit £200; price £350.

3.—**ISLE OF WIGHT.**—Light Retail; good residence; returns £250, capable of rapid increase; price £85.

4.—**EASY DISTANCE FROM CITY.**—Well-fitted Retail and Dispensing; corner position; returns about £700; price £400, or close offer.

5.—**IMPORTANT HEALTH RESORT.**—Dispensing Business; prominent position; large house; net profit £300; price £800.

SOUTH COAST.—Price £600; also £150.

56 CHEAPSIDE, LONDON, E.C.

(Next Door to Bow Church.)

THOMAS TOMLINSON & SON,

Chemists' Transfer Agents and Valuers,

9 NEW CANNON STREET, MANCHESTER.

42 YEARS' EXPERIENCE.

Valuations Conducted with careful attention to detail.

BUSINESSES FOR DISPOSAL, of various sizes and classes, in Weston-Super-Mare, Manchester (5), Liverpool (4), Leeds (2), Birmingham, Sheffield, Bradford, Preston, Accrington, Bury, Burnley, Nottingham, Clough Fold, Crewe, Swinton, Bolton, Penmaenmawr, Barrow-in-Furness, Bury St. Edmunds, Jersey, Oldham, Heywood, Prescot, South Wales, Cheshire, Dewsbury, West Bromwich, Blackburn, Stockport, Hyde, Chesterfield, Usk, and other towns.

Particulars free to bonâ-fide applicants stating locality, size, and class of Business required.

NO CHARGE TO PURCHASERS.

Telegraphic Address—"TOMTOM."

BUSINESSES FOR DISPOSAL.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond.

FOR Disposal, an old-established Retail and Dispensing Business in the Eastern counties; established nearly 100 years; good house on lease. For full particulars, apply "Foto" (238/25), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

EAST OF ENGLAND.—Good-class Business; a little Dispensing; good prices; long lease; large convenient house; conservatory; net profit nearly £300; cash price £650; no agents. A. B. C. (239/23), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A GOOD Dispensing Business, in a rapidly growing Liverpool suburb; an exceptional opportunity for an energetic man; returns between £500 and £600; good premises, on lease; price moderate. Apply to "Nemo" (201/19), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A RETAIL and Dispensing Business in the best part of Camonbury; in present proprietor's hands for nearly 20 years; long lease; can let off half rent if required; price from £300 to £400; suitable for anyone beginning business. Address, H., c/o Hearon, Squire & Co., 38 Southwark Street, S.E.

BARGAIN.—A neglected Business for immediate disposal; has done over £30 per week; present takings £16 per week, under a youth's management; profits large; two weeks' trial allowed; price £400; good house attached; low rent. Apply, 238/31, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

IN a small market town in the Midlands, a good-class Family, Retail, Dispensing, and Prescribing Business: returns £1,000: net profit over £350; same hands 30 years: retiring: good house, warehouse, and garden; price £650, or offer. Apply, P. G. (241/20), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

FOR immediate Disposal, old-established Cash Country Business in rapidly-rising town in Cheshire; central position; low rental; good house; returns £1,800; good profits; very complete stock, in first-class condition; fullest inspection invited. For detailed particulars apply "Cheshire," c/o Evans, Sons & Co., Liverpool.

A GENUINE Retail and Prescribing Business for Disposal, returning £700, in a growing London suburb; shop handsomely fitted and exceedingly well stocked; long lease at low rental; business very profitable; convenient house, in excellent repair. "Scotty" (235/2), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

VALUATION of Stock and Fixtures (about £400); good-class Business, best position, excellent market town, South-West of England, recently refitted and well stocked, doing an increasing business, but, owing to want of capital, must realise; will do £1,200 yearly. 237/37, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MANCHESTER (in a main thoroughfare).—A good shop and Business, with convenient house and private entrance: Dispensing and Family trade; illness the cause of selling; a year's returns would be accepted; this is a good chance for a sharp, pushing young man, who could soon increase returns. "Chemist," 423 Stockport Road, Manchester.

FOR immediate Disposal, the Chemist's and Druggist's Business as carried on by the late Mr. W. F. Adamson, at Longridge; stock and goodwill at valuation; this is a good opportunity for a smart business man, as it is a large and populous district, and no opposition. For particulars, apply to R. Adamson, Market Place, Longridge, near Preston.

£500.—For immediate Disposal, Stock, Fixtures, and Goodwill of old-established Chemist's Business, in Southern seaside health resort; excellently situated: good house, low rental, and long lease, or house may also be purchased. For fullest particulars address "Ixion" (238/27), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

S.W.—Chemist's Business, just opened, main road, no other Chemist near; splendid prospects; owner called abroad; must sell this week, or before Wednesday; rent £40, £20 can be let off; well stocked; price £35, worth £90; suit qualified or unqualified. "Abroad" (239/24), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TO be Disposed of, by private treaty, as a going concern that old-established Business of Chemist and Druggist No. 95 High Street, Burton-upon-Trent, carried on for many years by the late Mr. Edwin Hodson, with the stock-in-trade, goodwill, fixtures and fittings. Apply to Mr. Charles Harrison, Land Agent, 179 Horninglow Street, Burton-upon-Trent.

CHESHIRE.—Thoroughly well-stocked Drug and Drysaltery Wholesale and Retail Store, where an excellent Dispensing business can soon be acquired; excellent stand: good house and well-fitted shop, with convenient warehouse and stables attached; grand opportunity for energetic man; returns £1,250 per annum; rent reasonable; the stock and fixtures at a valuation: one of the vendors would remain on a short time to give effective introduction. Apply to "Value," c/o John Thompson (Limited), Hanover Street, Liverpool.

SOUTH COAST (fashionable resort).—Good-class Light Retail, Dispensing, and Prescribing Business; same hands 22 years; returns £750; gross profits three-fifths; very few patents sold; handsome corner shop; good 10-roomed house; price £600, or offer; stock and fixtures worth nearly all the money. 241/21, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

DISPENSING and Light Retail in N. district; increasing returns; £650; of this about £100 is for a well-known Proprietary article stocked by Wholesale houses, and capable of much increase by judicious advertising; vendor having other engagements will sell to an immediate buyer for £400. "Rheum" (9/3), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

YORKSHIRE.—Immediate disposal, through ill-health, an old-established Dispensing, Family, and Agricultural Chemist's Business, in principal street of market town; nicely-fitted shop, good house and garden; rent very low; capital opportunity for energetic young man; price £160. Address, "Yorkshire" (240/2), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BUSINESSES WANTED.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond.

WANTED, good-class Dispensing Business, returning £800 to £1,000. Particulars, in confidence, to S., 6 Abingdon Buildings, Bath.

WANTED, Cash Purchase, Business returning from £700 to £1,000 per annum; good class of trade, and capable of extension; London or a large Provincial town preferred. Apply, "Delta," c/o Evans, Gadd & Co., Exeter.

SMALL Retail and Dispensing Business in good thoroughfare, and capable of increase as Cash Drug Store, or premises if well placed for opening; London preferred; strict confidence. Bailey (238/8), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED to purchase, either in a good seaside or country town, a Light Retail, Dispensing, and Prescribing Business, returning £600 to £800; willing to pay a fair price for genuine concern. W. R. R. (237/36), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SITUATIONS OPEN.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond.

RETAIL.

QUALIFIED Assistant; age about 23; speaking French. Apply, 48 Regent Street, W.

SMART Assistant at once; unqualified; outdoors; Store trade. Grindley, Bon Marché, Liverpool, Limited.

WANTED, a Junior Assistant for the Retail counter; outdoors. Apply, giving full particulars, to D. P. Roberts, 120 North End, Croydon.

WANTED, immediately, competent Assistant, qualified; accustomed to brisk trade; outdoors; progressive salary. Woodcock, Birkenhead.

WANTED, Assistant, about 20; indoors; abstainer; Mixed Country business. Apply with full particulars, and send photo, W. Tudor, Chemist, Brecon.

IMPROVER or turnover Apprentice for good-class trade—Retail and Dispensing. Apply, stating all particulars, Edward Kershaw, Chemist, Alderley Edge, Cheshire.

JUNIOR Assistant for light Retail and Dispensing business: please state age, salary, and experience, &c. Moore & Co., Chemists, 28 Commercial Row, Pembroke Dock.

ASSISTANT (experienced, qualified) in high-class modern business. Send usual particulars (outdoors), W. Aston, Pharmaceutical Chemist, 21 Montague Street, Worthing.

QUALIFIED Assistant wanted. State age, salary required (indoors), and references, enclose photo, or personal application if convenient, to E. Miller, High Road, Clapton.

IMMEDIATELY, Junior, about 20, indoors; knowledge of Photographic trade. State usual particulars, salary required. Woollons, Chemist, 28 Kilburn Lane, London, W.

A QUALIFIED Assistant wanted, aged 23 to 24, for a permanency; personal interview preferred; good salary given. Apply, Thos. Davies, 485 King's Road, West Chelsea.

SITUATIONS OPEN CONTD

RETAIL—continued.

WANTED, indoor Assistant, used to good-class Store business; time can be arranged for lectures or study. State requirements to Pain, 70 Beckenham Road, Beckenham, S.E.

IMMEDIATELY, gentlemanly Assistant, qualified and well accustomed to first-class Dispensing trade. Apply, with carte and usual particulars, Jameson & Curtis, Hastings.

WANTED, Junior Assistant, for good-class Mixed Country business; short hours; no Sunday duty; outdoors. Apply, with full particulars, to Towusend, Long Sutton, Lincs.

QUALIFIED Assistant for a Dispensing and Light Retail business. Apply, with usual particulars and enclose photo, to John Cooper, Pharmaceutical Chemist, Weston-super-Mare.

IMMEDIATELY, an Assistant, about 23 years of age, qualified, and of good experience; indoors; London. State full particulars, to M. C., c/o Sanger & Sons, 2 Winsley Street, W.

ON demande un élève parlant Anglais et Allemand en la Grande Pharmacie de Nice; très pressé; appointement 200 frs. par mois. Adressez C. Rebee, Grand Pharmacie de Nice.

WANTED, a good Junior Assistant, who is a smart Salesman and not afraid of work; salary about £40 per annum; indoors; two kept. Apply to Henry Squire, 189 High Street, Deptford, S E.

AN Assistant, about 22 or 23 years of age, of good address; must be able to Dispense. State age, height, salary required (indoors), to W. Parsons, 2 Eastcombe Terrace, Blackheath, S.E.

WANTED, an outdoor Junior Assistant for Light Retail and Dispensing business; give full particulars, age, height, refereuce, and salary required, &c. Apply, 39 Eastgate Street, Gloucester.

JUNIOR or Improver wanted in a good-class country Retail and Dispensing business; comfortable home; easy hours. Apply, with full particulars, to J. Hayllar, Chemist, Hoddesdon, Herts.

WANTED, immediately, Junior Assistant. Apply personally or write, stating full particulars and salary required (indoors), Skewes, Chemist, 2 Upper Street, Islington, N. (near the Angel).

WANTED, competent Assistant for Retail Drug and Dispensing Department; rooms and attendance free. Apply, enclosing c.d.v., and state salary expected, Kiloh & Co. (Limited), Cork.

WANTED, unqualified, single Junior Assistant (R.C.); qualified might be entertained; half-day holiday; could take busiuess over on easy terms if desired; Lancashire manufacturing town. X. (241/18), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, a qualified Assistant (30) for a Mixed Country business; one having a little capital and desiring a Partnership would be entertained. Apply, Slater & Co., High Street, Stone, Staffs.

WANTED, a Juuior, accustomed to high-class business, to attend counter, put up stock, &c.; outdoors. Apply, "West-end" (9/35), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

JUNIOR Assistant; outdoors; must be good Dispenser, and have good references. Write, stating age, salary (photo if can), and particulars, or apply personally, to Cadman & Co., Blackheath Village, S.E.

WANTED, smart, unqualified Junior (tall) for Drug-store. Apply, in first instance, enclosing photo, and stating age, references, and salary required, to C. B., Westoe Lane Post Office, South Shields.

WANTED, an Assistant; must be a good Counterman and well up in Dispensing; aged about 25; tall and good appearance and address. Apply, with particulars and references, to Theckston, New Brighton.

MARRIED Assistant wanted, to reside on premises; must be well up in Store business, sober, honest, and capable of taking charge; good salary and com. "Beta," Chemists' Club, Farringdon Avenue, London, E.C.

QUALIFIED Assistant wanted, about 23,; indoors. Apply, with full particulars and photo, to S. W. Ord, Pharmaceutical Chemist, 3 Hanover Street, Regent Street, W. A vacancy also for an Apprentice.

WANTED, active, qualified Assistant (outdoors): state age, references, experience, when disengaged, &c.; hours 8.30 to 8, Saturdays 10.30; no Sunday duty. W. Proctor, 7 New Bridge Street, Newcastle-on-Tyne.

OUTDOOR Assistant (qualified); must be a reliable Dispenser and good Counterman. Apply, stating age, height, references, salary required, and enolose photo, to Hicks & Co. (Limited), Queen Street, Cardiff.

JUNIOR for quick Cash business, in London suburb; outdoors; short hours; 3 kept. Full particulars to "Juuior," c/o Messrs. Baiss Bros., 4 Jewry Street, E.C.

WANTED, at once, Assistant; indoors; good all-round. Send age, experience, salary, reference, and carte (returnable) to Herbert Woodcock, Croydou.

JOHN BARKER & CO. (LIMITED), Keusington, W., are in want of a Counterman; indoors; personal applicatiou necessary; close at 6.30, 2 o'clock Saturdays; no Sunday duty.

WANTED, immediately, qualified Assistant; one accustomed to first-class Retail and Dispensiug business. Send full particulars and photo (to be returned), to B., c/o Evans, Sons & Co., 56 Hauover Street, Liverpool.

FIRST-CLASS opening in English Chemist's iu Japan for qualified Assistaut, about 25, with really good Loudon experience; short hours; liberal salary. Full particulars to Dakin Brothers, 87A Leadenhall Street, E.C.

WANTED, immediately, Junior or Improver; must be steady, honest, and thoroughly reliable; weekly half-holiday. Full particulars as to experience, height, salary, and photo if possible, to Crauge, Chemist, Aldershot.

QUALIFIED Assistant, about 30, for first-class Retail; must be well up-to-date, good appearance, and obliging manner. C. de v. if convenient, stating salary, &c., to G. Woolley, Station Pharmacy, London Road, Leicester.

QUALIFIED Dispenser wanted, accustomed to Store trade; must be quick and accurate; no Suuday duty; hours not long. Apply, with full particulars, to Q. D. (9/60), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, Assistant (Englishman), age from 19 to 21; used to Mixed Retail business. State particulars of experience, salary required (indoors), and enclose photo (to be returned), to Richardson, Chemist, Hadfield, near Manchester.

WANTED, at once, an energetic and reliable Manager, for a Light Retail and Dispensing Business; age about 30; outdoors; must have good references. Apply, "Perfume," c/o Evans, Sons & Co., 56 Hanover Street, Liverpool.

NATHANIEL SMITH & CO., Cheltenham, require a qualified outdoors Assistant, who has had good experience in high-class business. Applicants will kindly give full particulars of their experience, &c., to 373 High Street, Cheltenham.

COMPETENT Assistant, about 26, indoors, accustomed to good-class Retail and Dispensing; must be well recommended. Particulars as to salary, references, &c., with photo (if convenient), to F. Rossiter, 9 Grand Parade, St. Leonards-on-Sea.

WANTED, a qualified outdoor Assistant, not over 28 years of age, of gentlemanly appearance, and not afraid of work; single; must have good references, and require a permauency. Apply, "Chemist," 1 Alfred Place, Park Road, Liverpool.

QUALIFIED Manager for small Country business; comfortable house; Extractor; married preferred; state age, height, salary, references, and photo if possible; must be an all-round man. Apply first to F., 16 East Park Terrace, Southampton.

QUALIFIED Assistant wanted, about 26, for good-class Mixed country business. Send photo (if possible), stating age, height, salary required (outdoors), married or single, and all other particulars, in first letter, to Thos. K. Hey, Chemist, Hebden Bridge, Yorkshire.

WANTED, in good-class business, smart Junior (indoors) not under 21; must have gentlemanly appearance and address. Apply, stating age, height, and salary required, and enclose reference and photo, Chas. A. Neale, 16 Townshend Road, Regent's Park, London, N.W.

DURBAN, NATAL.—Wanted, an Assistant, Minor; age not over 30; thoroughly reliable and trustworthy; three years' agreement; second-class passage paid out. Apply, with testimonials and full particulars, to Export Department, S. Maw, Son & Thompson, Aldersgate Street, E.C.

JUNIOR Assistant, about 23 years, at the end of January; outdoors; good experience and refereuces; preferred with a knowledge of Homœopathic Pharmacy. State experience, salary, and full particulars, with photo if possible (to be returned), W. Butcher & Son, Blackheath, S.E.

LANCASTER. Young man (qualified), with view to Partnership or ultimate successiou in well-known and successfully-conducted light-class Retail and Prescribing; must be active, good Prescriber, and well recommended; references exchanged. Full particulars to Lund, Chemist, Lancaster.

JUNIOR or Part-time Assistant wanted; must be a good Counterman, accustomed to a high-class Dispensing business, and capable of being left in charge; ample time given for study or to attend eveniug classes. Apply, personally if possible (during evenings), to F. S. Horsey, 2 Chichester Street, Upper Westbourne Terrace, W.

FOR the Provinces.—An Assistant, indoors only, not over 26, accustomed to Agricultural and good-class Family business, and able to Extract Teeth; no Sunday duty; comfortable home. Applicants must state age, salary required, and enclose photograph (which will be promptly returned), Herbert Webb, Pharmaceutical Chemist, Buckingham.

RETAIL—continued.

WANTED, at once, good Junior Assistant for Retail and Dispensing; good references; personal application if possible; one used to modern Cash business. Boxall, Chemist, Cricklewood, N.W.

WANTED, Junior Dispenser (qualified) at once; outdoors; hours 9 to 7. Apply, by letter only, stating full particulars and salary required, "Chemist," Haymarket Stores, 28 Haymarket, S.W.

WANTED, immediately, smart, reliable Junior, aged about 18 to 21 years, in Mixed Country business. State experience, salary (outdoors), age, and photo, Clegg & Son, Chemists and Stationers, Wantage.

BRIGHTON.—A qualified Assistant; indoors. State age, height, salary, references, and when disengaged; send carte if convenient (which will be returned), K. Pears & Son, 16 Western Road, Brunswick Square, Brighton.

WANTED, Junior Assistant or Improver; knowledge of Photography essential; time allowed for study if required; North-countryman preferred. Apply with full particulars, stating age, salary required, &c., to W. Batchelor, 152 Milton Road, Gravesend, Kent.

QUALIFIED Assistant wanted, accustomed to good-class Dispensing business; abstainer preferred. Apply, stating when disengaged, age, height, experience, reference, salary required (indoors), and enclose photo, to J. G. Atkinson, 2 Essex Grove, Upper Norwood, S.E.

JUNIOR Assistant for Country business; indoors; 2 kept; must be active and obliging; aged about 20; one just completed apprenticeship preferred. State age, height, salary required, with reference, or apply personally, Watson, Post Office, Caistor, Lincolnshire.

WANTED, a smart, energetic Assistant to manage old-established business; qualified; single; indoors; references as to integrity and ability must be unimpeachable; one with Store experience preferred; liberal terms to the right man. Write, "Viola," c/o Saunt, Solicitor, 3 Fowkes Buildings, Great Tower Street, E.C.

WANTED, immediately, for India, a qualified man (single) to manage a Drug department in a large Retail establishment; about 27 years' of age, thoroughly competent and of gentlemanly appearance; 5 years' agreement; salary to commence at 300 rupees per month, increased annually by 25 rupees per month. Apply, giving full particulars, Box 1004, Sell's Advertising Offices, London.

WHOLESALE.

TRAVELLER wanted by Perfumery house; previous experience preferred; salary and commission; liberal terms to suitable man. 241/22, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MANUFACTURING house in the Midlands wants the services of a man in London who has a connection with the Wholesale. Apply, P. (228/18), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

INVOICE Clerk, of good experience, by a firm of Wholesale Druggists; must have filled same capacity. Apply, by letter, stating age, salary required, &c., to 242/25, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ASSISTANT, for the Wholesale; a qualified Chemist preferred. Apply, by letter in the first instance, stating full particulars and salary required, to Blackwell, Hayes & Spilsbury, Manufacturing Chemists, Moor Street, Birmingham.

TRAVELLER.—Wanted, a young and energetic man, of good address, to call upon Soap Makers, Confectioners, and Wholesale Druggists; one with London connection preferred. Address, X. Y. Z. (242/24), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, Traveller, active experienced, of good appearance and address, to represent Drug house in London; permanent situation; knowledge of Retail trade necessary. Apply, with references, G. B. D., (7/29), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TRAVELLER.—A London firm of Oil Merchants, Drysalters, &c., with large connection in Thames Valley, near Midlands, and West, is open to appoint a representative fully experienced in the trade; salary and expenses. Reply, with particulars, to T. A. 46, Deacon's, 154 Leadenhall Street, London.

TRAVELLER wanted for Town and Home Counties; state previous experience, age, salary required; applications with full particulars only, no others will be entertained; permanency for pushing man with sound connection. Apply, 238/39, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LABORATORY Assistant for provincial Wholesale; must be experienced in the manufacture of Concentrated Infusions, Liquid Extracts, B.P. Preparations, and Surgeons' Specialities. Apply, with full particulars, and enclose carte, to "Provincial" (238/30), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A LEADING firm of Pharmaceutical Specialists require one or two competent, smart young fellows to represent them in the principal provincial centres. Applicants must be unmarried, have had previous experience in Travelling, with some connection amongst Doctors and Chemists, be first-rate Salesmen, and thoroughly up-to-date. Photographs, testimonials, and stamped envelopes are not required, and cannot be returned. Address, "Wringer" (251/31), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

APPRENTICESHIPS.

RETAIL.

APPRENTICE.—E. H. Hamilton, Chemist and Druggist, has a vacancy for an indoor Apprentice; premium required. 19 St. James' Street, Walthamstow.

WANTED, to Apprentice well-educated girl, aged 16, in Dispensary or good-class Chemists' business; has knowledge of business routine; passed Preliminary; indoors; time for study. Horniblow, Charlbury, Oxon.

APPRENTICE.—Mr. Groves, Pharmacist and Analyst, Blandford, has a vacancy for a gentlemanly youth as in or out door Apprentice; must have passed or be prepared to pass the first examination; exceptional facilities; home comforts; Veterinary, Photographic, and Mineral Water departments; references exchanged; premium required.

WANTED, by a firm of Pharmaceutical Chemists and Wholesale Druggists, a well-educated youth who is desirous of acquiring a good knowledge of either the Retail or Wholesale trade, or both; a liberal premium would be required for the exceptional advantages offered. Address, "Pharmacist," c/o Messrs. Morson & Son, Southampton Row, W.C.

SITUATIONS WANTED.

1s. for 12 words or less; 6d. for every 6 words beyond.

RETAIL.

JUNIOR; 19 years; 5 ft. 9 in. A. Gibbs, 12 St. James' Street, Nottingham.

PART-TIME; qualified; 2 or 3 hours, evenings. 9 Osborne Road, Finsbury Park, N.

PART-TIME; 22. Please state terms, Bellamy, c/o Mr. Fletcher, Chemist, Ilkeston.

JUNIOR: 19½; 5½ years' good experience. McGillivray, 89 High Street, Nairn, N.B.

JUNIOR; 20; good experience; disengaged. F. H. Brackenbury, Baldney, Lincoln.

QUALIFIED Dispenser; disengaged; aged 24. H. Davies, 24 Compton Terrace, Islington.

ASSISTANT or Dispenser; aged 24; good references. "Alpha," 14 Offley Road, Brixton, S.W.

MINOR Student, 23, tall, wishes evening employment, near Ludgate Circus. Dutson, Chepstow.

JUNIOR Assistant or Dispenser; aged 21; in London preferred. Askham, Flockton, Wakefield.

JUNIOR; 20; 4 years' experience; good reference; abstainer; outdoors. John Ross, Maryport.

QUALIFIED Assistant; disengaged February 4; aged 23½; London. G. N., 66 Goldhawk Road, W.

DISPENSER to Surgeon; excellent reference; disengaged. R. H. Wright, New Street, Oakham.

LADY Dispenser and Bookkeeper; qualified; highest testimonials. A.E.C., 24 Hugh Street, Pimlico.

ASSISTANT; outdoors; Yorkshire; 8 years' London and country experience. Fall, Barrcroft, Ripon.

UNQUALIFIED; 26; 5 ft. 7½ in.; disengaged 30th inst. "Assistant," c/o Reid, Chemist, Chelston, Torquay.

AS Assistant; aged 25; height 5 ft. 9 in.; experienced. W., 2 Ivy Grove, Sherwood Rise, Nottingham.

TEMPORARY or permanent; qualified; Extractor, Dispenser, and Prescriber. Hole, 1 Parks, Minehead.

DISPENSER or Assistant; long experience; permanency; outdoors. R. Berry, London Road, Basingstoke.

JUNIOR; 20; medium height; 5 years' experience; good references. Evans, 31 Parliament Street, Gloucester.

SITUATIONS WANTED CONTD

RETAIL—continued.

ASSISTANT: tall; 24; high-class experience; good references. Miller, 117 Princes Street, Edinburgh.

ASSISTANT; 23; 7 years' experience, London and Provincial. Phillips, 5 Coningsby Road, Ealing, W.

MANAGER; Branch or otherwise; qualified; 28; good references. H. C., 342 High Road, Broudeshury, N.W.

MINOR Student; part-time; 22; 8 years' experience; good references. Chapman, 61 Beulah Road, Walthamstow.

ASSISTANT, Manager or Locum; varied experience. "Chymist," 41 Princes Square, Kennington Park, London.

ASSISTANT; 8 years' experience; good references. 6 Crow Nest Road (opposite Highfield Terrace), Bingley.

LONDON; immediately; in good-class Dispensing business; aged 22; abstainer. B., 7 Hafer Road, Battersea Rise.

ASSISTANT; 25; qualified; disengaged; good references. Hammond, West Burton, Aysgarth R.S.O., Yorks.

ASSISTANT; unqualified; 10 years' experience; 27; disengaged. "Statim," 47 Ravenswood Road, Balham, S.W.

AS Manager, temporary or permanent; aged 43; qualified; disengaged. C. M., 1 Stratford Villas, Camden Square, N.W.

SENIOR or Manager; 26; qualified; outdoors; first-class London experience. "Ajax," 4 Stanley Street, London, W.

ASSISTANT: qualified; 26; tall; in good Dispensing house; experienced. H. Watson, Richmond House, Spennymoor.

JUNIOR; 21; 4 years' experience: Bristol or neighbourhood preferred; state salary. Davies, Down, Manordilo, Carmarthen.

LADY Dispenser; qualified; excellent references. Z. (235/38), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

AS Representative; 9 years' first-class Retail experience; excellent references. Pearson, 288 Elgin Avenue, Maida Vale, W.

IMPROVER; 18; 5 ft. 9½ in.: Prelim.; Chemist's son, used to quick Cash business; Photography. Farr, Yaxley, Peterborough.

EVENING engagement required; qualified; aged 31. J. (241/37), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BRANCH Manager or Assistant in country or country town; 24; qualified; married. Wood, Helmsley Cottage, Boston Spa, Yorks.

JUNIOR: 22; in London; good experience: excellent references; been used to taking sole charge. T. Williams, Bridgend House, Aberayron.

MANAGER; qualified; 28; single; good references; experienced. 240/7, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ASSISTANT; 22; 6 years' experience; medium height; good references; abstainer; North preferred. "Photog.," Southleigh, Buxton.

MANAGER; capable, energetic, experienced; 38; qualified. "Tall" (238/13), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PART-TIME or Dispenser to Surgeon; temporary; 23; good references and experience; City or S.E. preferred. Eldred, Sudbury, Suffolk.

ASSISTANT or Manager; 28; good experience and references; abstainer; permanency; disengaged. W. M. T., 1 Culmore Road, Peckham, S.E.

QUALIFIED Assistant, 22, requires engagement in London; good experience; accurate Dispenser. Coverdale, 1 Milverton Street, Kennington.

DISPENSER and Bookkeeper to Surgeon or Assistant in Hospital; lady with Apoth. Hall Certificate; experienced. Hills, 79 Fairfax Road, N.W.

IMMEDIATE, as Assistant; London and country experience; aged 25; outdoors preferred. "Chemicus," 63 Ilderton Road, South Bermondsey.

EXPERIENCED Assistant; aged 26; outdoors; Extractor; good references; disengaged February 1; permanency. A., 13 London Road, Dover.

LOCUM or permanent; disengaged; aged 29. "Extractor," 2 Horton Street, Lewisham.

ASSISTANT; 25; qualified; 8½ years' experience; height 5 ft. 7 in. "Chemist," 27 Cronch Hill.

QUALIFIED; 23: City and West-end experience. Evans, 3 Millman Street, Bedford Row, W.C.

ASSISTANT, 23, qualified, with West-end experience, requires outdoor situation; City preferred. Clayton, 9 St. Mary's Road, Walthamstow.

LADY seeks engagement as Assistant to Chemist; near London preferred; good testimonials, and 3½ years' references. Sunnymead House, Oxford.

MAJOR (23½) seeks engagement as Manager or other responsible position for second week in February. Armitage, Chemist, Penistone, Sheffield.

MINOR Student; town; Apothecaries' Hall certificate; Dispensing and counter; 16 years' experience. "Minor," 15 Badsworth Road, Camberwell, S.E.

AS Dispenser and Bookkeeper to Doctor; experienced; 28; single. Particulars to 235/30, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

YOUNG qualified French pharmacist of the first class desires situation in London pharmacy; best references. Darbouet, 13 Southampton Street, London, W.C.

AS Dispenser (part-time): good experience; unqualified; near Manchester preferred. X Y.Z. (235/37), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

JUNIOR; unqualified; Dispensing; time for study; London; outdoors preferred; good experience and references. "Rhubarb," 162 Kennington Park Road, London, S.E.

DISPENSER to Doctor or Assistant to Chemist; aged 32; competent; permanency; town or country; good references. "Veritas," 10 Coptic Street, Bloomsbury, London.

BRANCH Manager or Assistant; outdoors; good experience; competent; 31; single, steady, reliable; unqualified; disengaged. Mitchell, 7 Calder Street, Todmorden.

IMMEDIATE; disengaged; aged 27; 12 years' experience; good references; London experience and London preferred. J. S., c/o Mr. Proctor, Chemist, Glossop, Manchester.

ASSISTANT; outdoors: 5½ years' high-class experience, including Homœopathic and Store; height 6 ft.; good references; Northern town preferred. F. Green, 5 Grange Terrace, Sunderland.

QUALIFIED Chemist, 23, disengaged, competent and experienced in first-class pharmacy, seeks responsible position. "Celeris" (238/10), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MANAGER or Senior Assistant: 27; qualified; 10 years' experience, country, town, and seaside; tall; single; disengaged; good references. X. Y Z., c/o Wright & Co., Southwark Street, London, S.E.

QUALIFIED and thoroughly experienced man seeks re-engagement; aged 40; unmarried; good Dispenser; permanency preferred; salary moderate; disengaged. "Masonic," 7 Pepler Road, Kent Road, S.E.

AN Analytical Chemist, of some years' experience, desires a position as Chemist or Manufacturer; has had practical experience in Pharmacy. 233/30, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

EXPERIENCED Surgeon's Dispenser; aged 24 years; would give his services to a Chemist to learn Retail, for small salary. Apply, "Prescriber" (240/11), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MANAGER; qualified; Branch or otherwise; registered Dentist; good Prescriber and Extractor; abstainer; good references; permanency; 26 years' experience; disengaged. "Chemicus," 76 Dover Street, Folkestone.

LONDON or Manchester.—Junior, 23, 6½ years' experience, desires situation with time for classes; Dispenser, Prescriber, Extractor; excellent references; disengaged. W. Greenwood, Heathfield Road Pharmacy, Handsworth, Birmingham.

WANTED by a qualified Chemist, a situation in South Africa; has had good experience both in town and country; well up in the preparation of Sheep Dips, both poisonous and non-poisonous, soluble kresol, &c. Address, "Lincoln" (238/17), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SPLENDID offer: Dentistry introduced (own outfit).—Advertiser, unqualified, desires engagement in Light Retail and Dispensing business, indoors, with spare time for study; aged 32; 5 ft. 6 in.; single; abstainer; 16s. indoors, 28s. outdoors; references and photo sent. 236/6, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

RETAIL—continued.

MANAGER or Locum; qualified; aged 40; disengaged. "Chemicus," 112 Foxberry Road, Brockley, S.E.

DISENGAGED; qualified; 26; good experience; outdoors. Jones, 31 Approach Road, Victoria Park, N.E.

OUTDOORS: London or suburbs; 10 years' experience; aged 26. Barnes, 13 Camberwell New Road, S.E.

DISPENSER or Branch Manager; Prescriber and Extractor; qualified; disengaged. M. W., 55 Liverpool Street, W.C.

AS Manager or Locum; Stores or otherwise; Extractor, Prescriber. Bailey, 17 Stafford Road, Wynne Road, Brixton, S.W.

JUNIOR; 21; tall; near London preferred. "Statim" (242/23), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

33. Assistant; permanency; Extractor, Prescriber, Dispenser; abstainer; good address. "Locum," 29 Berwick Street, Pimlico.

EVENING engagement or half-day; Chemist or Surgeon; experienced. 242/26, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MANAGER: qualified; London or suburbs; outdoor; used to cash-trade; good Dispenser, Photographer, and Extractor. "Manager," Nurthen, 390 Strand.

QUALIFIED; 23; quick, accurate Dispenser; high-class experience; abstainer; please state hours, salary, &c.; outdoors preferred. G. W. G., 18 Colnbrook Street, Southwark, S.E.

QUALIFIED Chemist and Medical Man requires an engagement; good experience; London or provinces. 242/29, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

COMPETENT Assistant, 27, German qualification, 3 years' City experience, fluent English and French, highest references, wishes engagement in London; outdoors preferred; disengaged February 1. Matthaei, 90 Chiswell Street, E.C.

WHOLESALE.

YOUTH desires berth in Laboratory; experienced. Dempsey, 16 Wynford Road, London, N.

ENGAGEMENT, Wholesale; 9 years' Retail experience; 23. A. R. B., 3 Crozier Street, Stangate.

JUNIOR requires situation, Wholesale or Manufacturing; salary no object; Retail experience only. 18 Bridge Street, Llangollen.

STOCKKEEPER, Packer; 2 years' Retail experience; highest references. Address, Durrant, 24 St. Paul's Terrace, Great Yarmouth.

WETS. Dries, or Storekeeper; 20 years' experience (Corbyn Stacey); aged 36. Emerson, 3 Mabel Cottages, Cobbold Road, Leytonstone.

AS Clerk or Traveller; aged 24; 5 years with Wholesale Druggists; excellent references; salary moderate. L., 42 Narcissus Road, N.W.

ADVERTISER (26) requires position in Warehouse; good wet counter experience. A. B. (240/13), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

AS Traveller, Sundries or Drugs; good connection; South Wales, Midlands, Eastern Counties; good references. Thomas, 136 Whittington Road, Bowes Park.

TRAVELLER or Salesman in Drugs, Sundries, or Photo-apparatus; disengaged; highest references. 233/34, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

YOUNG man (21), having had good experience in a large Wholesale and Retail Chemist's, desires a position in a Warehouse; first-class references. R., 34 New Road, Stepney, E.

ADVERTISER, with good Wholesale experience, desires engagement, wet or dry; permanency desired; low wage. 240/6, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

GENTLEMAN requires berth as Traveller; experienced; very good appearance and address; highest references. 238/37, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

CAPABLE, qualified Chemist and Druggist, Retail experience only, desires to represent Wholesale firm; excellent testimonials. "Motor" (242/9), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

AS Laboratory Manager; 16 years' experience in the Laboratory of one of the largest Wholesale firms; first-class references. "Camphor" (237/38), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ADVERTISER is open for engagement as Buyer or in position of trust; sound experience, Drugs, Sundries, and packed goods. 235/65, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TRAVELLER.—Active, energetic gentleman wishes to represent first-class Wholesale Drug or Sundries house; 20 years' Wholesale, Retail, and Medical experience; good appearance; first-class salesman; aged 36; highest references. J. H., 47 Oldfield Road, Salford, Manchester.

TRAVELLER, first-class connection, London and suburbs Chemists; shortly disengaged; seeks reappointment; good Drug or Sundry house, glass bottles, chemical apparatus, &c.; highest references; fidelity guarantee. "Fides" (239/2), Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading, which can be obtained on application.

DAISY.—For particulars of an unique display to draw crowds to the window, write to "Daisy," Leeds. Messrs. Hickman, Chymists, Bridgewater, wrote: "The model is fetching the people, and just the thing to make Daisy HUM."

ASSISTANTS rapidly prepared personally and through the post for all examinations; most successful system; numerous high passes at Major, Minor, and Apothecaries' Hall; competent tutors in all departments. Apply, Mr. G. E. Skerry, M.A., the City School of Chemistry and Pharmacy, 27 Chancery Lane, London.

COUNTERS, mahogany top, from 7*s.* 6*d.* per foot run; bent plate counter case, 6 feet long, 95*s.*; sloping front counter case, metal frame, 5 feet long, 12 inches high, £5; cheapest house for window fittings plate-glass shelves, mirrors. Send for estimates, Treble & Co., Complete Shop Fitters, Rectory Works, Jenner Road, Stoke Newington, London, N.

TO be Sold, for a moderate cash sum and a royalty, the process of two new, original, and genuine Temperance Drinks; they are of superior character, agreeable flavour, and stimulant, although free of any alcoholic, medicinal, or confectionery taint; they may be sold in either concentrated or aerated form. Address, "Doctor," c/o Jones & Co., Library, Boundary Road, N.W.

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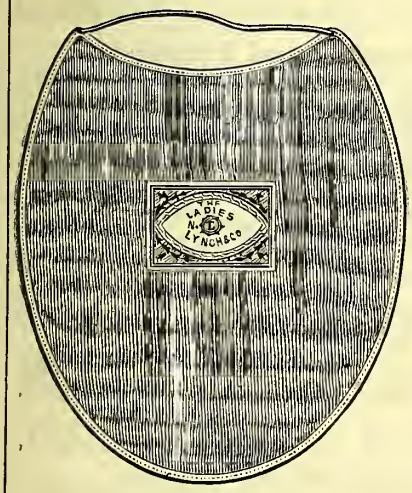

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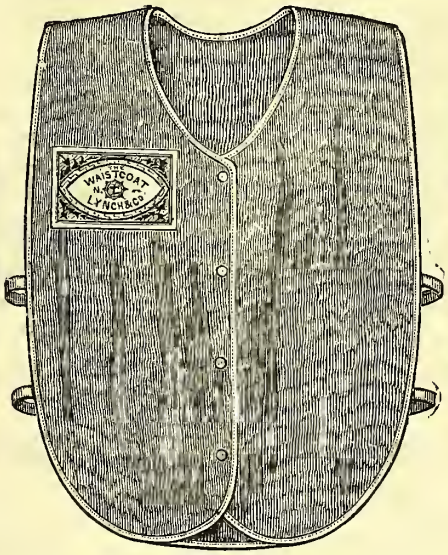

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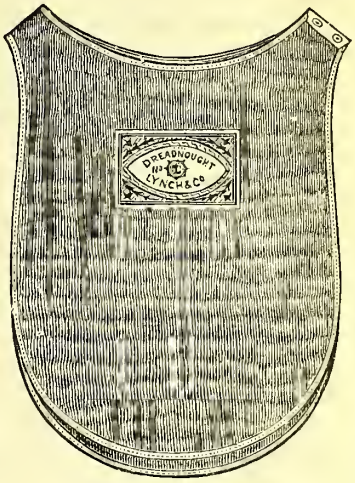

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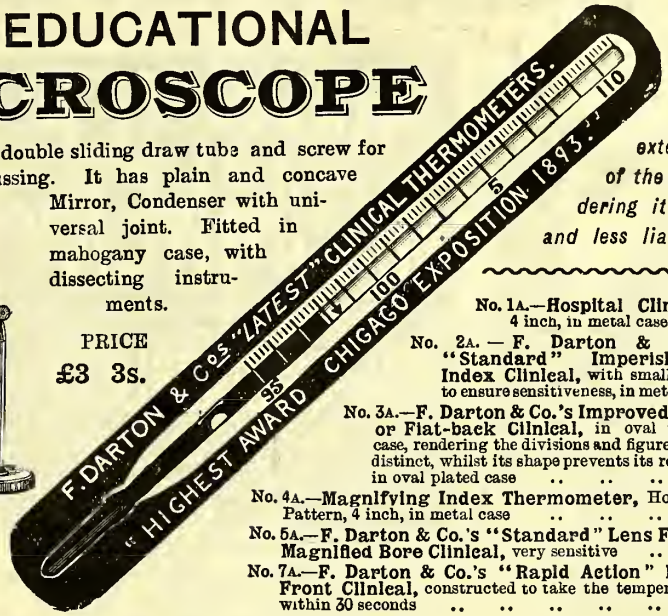

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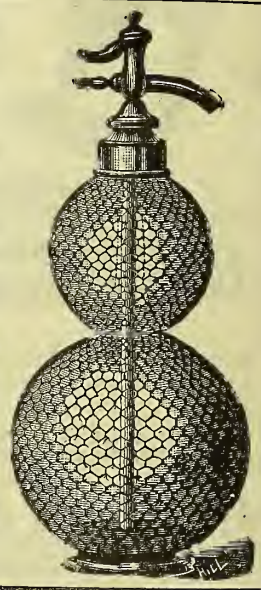

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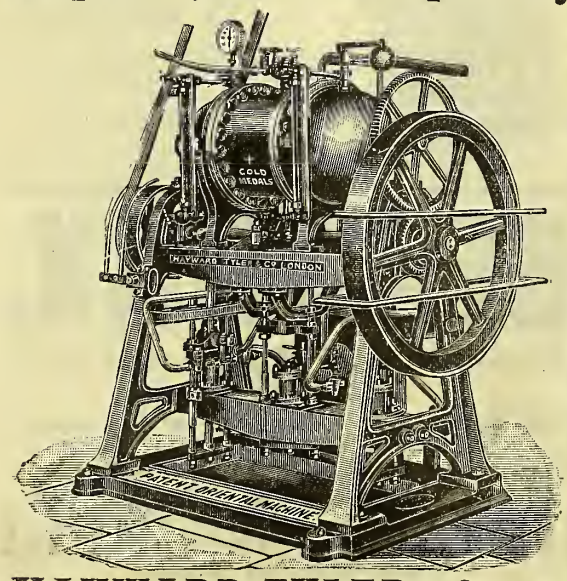

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SODA-WATER MACHINE.

For use with the Liquefied Carbonic Acid Gas.

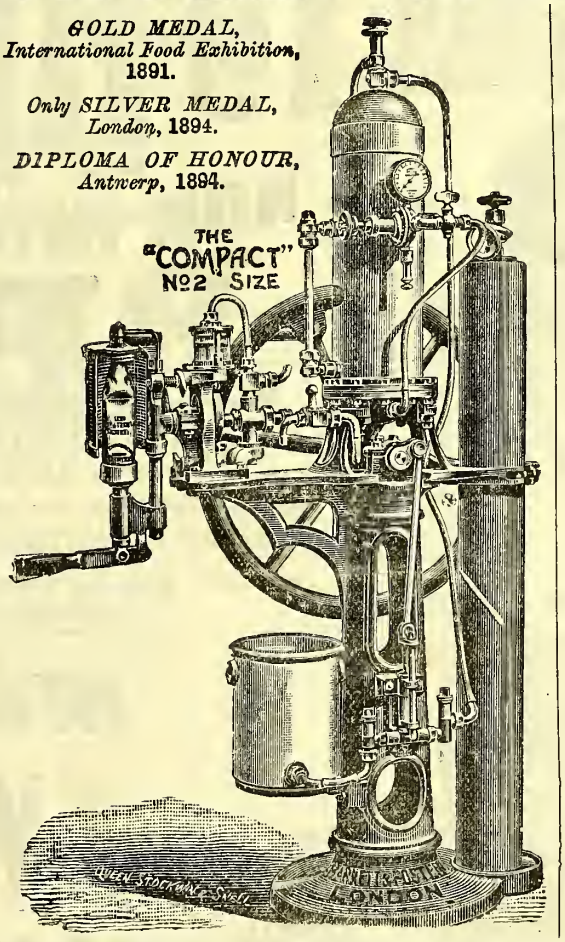
Specially designed for use where space is an object, and for those having a large retail trade, such as Chemists, Hospitals, Restaurateurs, Hotel Proprietors, &c. They are ready for work immediately, require no fixing, and produce Aërated Waters of the very highest quality at a minimum of cost.

NO DANGER.
NO MESS.
PERFECTLY RELIABLE.

GOLD MEDAL, International Food Exhibition, 1891.

Only SILVER MEDAL, London, 1894.

DIPLOMA OF HONOUR, Antwerp, 1894.



We guarantee to produce a better article with these than any other system adapted for using the Liquefied gas, and at a lower pressure, thus effecting an immense saving in bottles, and also reducing risk of accidents.

In use by Leading Chemists in all parts of the United Kingdom.

TWO FILLERS INCLUDED.

No. 1 Size, complete with Turnover and Syphon-filling Machine, and fitted with fast and loose Pulleys for driving by power ... Code word (*Supremacy*) **£60**
Producing Capacity by Hand-power 600 dozen per day.
" " Power 1,200 " "

No. 2 Size, complete with Turnover and Syphon-filling Machine Code word (*Royalist*) **£43**
Producing Capacity by Hand-power 350 dozen per day.
" " Power 700 " "

No. 3 Size, complete with Turnover or Syphon-filling Machine ... ... Code word (*Retailer*) **£33**
Producing Capacity by Hand-power 200 dozen per day.

Syrup Pump fitted to the Turnover Filling Machine on either of above (*Injecto*) £2 extra. If fitted with one Filling Machine only, the two largest Machines are charged £3 less than above prices.

SOLE INVENTORS AND MANUFACTURERS OF THE

"NIAGARA" BOTTLE AND THE LONDON-MADE SYPHON

KNOWN ALL OVER THE WORLD.

Illustrated Descriptive Catalogue of every requirement for the Mineral Water Trade on application.

NIAGARA WORKS, 26T EAGLE WHARF ROAD, LONDON, N.

MASON'S EXTRACT of HERBS

Makes the Finest Beverage in the World.

FOR MAKING

NON-INTOXICATING BEER

IMITATED, BUT NOT EQUALLED.

One Table-spoonful of MASON'S Extract of Herbs makes One Gallon of Splendid Non-Intoxicating Beer.

The Finest, most Refreshing, and Pleasantest Beverage obtainable. ***Try it!***

GOOD! It's MASON'S.

In Bottles, 6d., 1/-, and 2/-

Mason's WINE ESSENCES.

Ginger, Orange, Raspberry, and all flavours.

STOCKED BY ALL THE WHOLESALE HOUSES.

NEWBALL & MASON,
NOTTINGHAM.

Hunyadi János

The revised prices of the above (to the Trade) have been fixed by Mr. Andreas Saxlehner, the Proprietor, as under:—

22/6 per case of 25 large bottles, or **12/-** per dozen.
35/- „ of 50 half-bottles, or **10/-** „

SPECIAL TERMS FOR QUANTITIES ON APPLICATION.

CARRIAGE PAID. TERMS.—STRICTLY NET.

INGRAM & ROYLE, LTD.

VICHY Head Office— 52 FARRINGDON ST. LONDON, E.C. **VICHY**

LIVERPOOL—19 South John Street. BRISTOL—80 Redcliff Street.

Carriage Paid. Price List of all Natural Mineral Waters on Application.

WIESBADEN GOUT WATER

(WIESBADENER GICHTWASSER).

This water, when taken in sufficient quantity, is an absolutely certain remedy for Gravel and Uric Acid Calculi, and a most certain prophylactic against both Acute and Chronic attacks of Gout.

WIESBADEN GOUT WATER

Can be obtained from any Chemist or Mineral Water Dealer throughout the United Kingdom in bottles containing ¾ litre.

In cases of 1 doz. each, 12/6 per doz.; in cases of 3 doz. each, 12/- per doz., at cellars in London.

WIESBADENER BRUNNEN COMPTOIR.

LONDON AGENCY— **L. R. VOIGT & CO., 25 Great Tower St., LONDON, E.C.**

DEPOTS—

LONDON—Wholesale Depot, Messrs. Ingram & Royle, Limited, 52 Farringdon Street, E.C.
„ Messrs. E. Gallais & Co., 90 Piccadilly, W.
ABERDEEN—Messrs. Paterson & Sons, Spring Gardens.
BIRMINGHAM—Messrs. Southall Bros. & Barclay, Lower Priory.
BOMBAY—Messrs. Kemp & Co., Limited, 7 Elphinston Circle.
BOURNEMOUTH—Messrs. G. E. Bridge & Co., 128 Old Christchurch Road.
BRIGHTON, EASTBOURNE, and HASTINGS—Messrs. R. Fry & Co., Limited, Middle Street.
BRISTOL—Messrs. Ferris & Co., Union Street.
CALCUTTA—Messrs. Hadenfeldt & Co.
CAMBRIDGE—Mr. H. T. Parson, 5 Peas Hill.
CHELTENHAM—Messrs. Butcher & Pattison, 418 High Street.
CORK—Messrs. Kiloh & Co., Limited, 108 Patrick Street.
DUBLIN—Messrs. Hamilton, Long & Co., Limited, 3 Lower Sackville Street, 107 Graham Street, and 1 Rathmines Terrace.
EDINBURGH—Messrs. Duncan, Flockhart & Co., 104 and 106 South Canongate.
EXETER—Messrs. Evans, Gadd & Co., 97–100 Fore Street.
GLASGOW—Glasgow Apothecaries' Company, 32 and 34 Virginia Street.
HULL—Messrs. Lofthouse & Saltmer, 12 Market Place.
JERSEY—Mr. John T. Baker, 27 Halkett Place.
LEEDS—Messrs. Reynolds & Branson, 14 Commercial Street.
LIVERPOOL—Messrs. Clay & Abraham, 87 Bold Street.
MANCHESTER—Messrs. Jewsbury & Brown, 113 Market Street.
NEWCASTLE-ON-TYNE—Messrs. John Ismay & Sons, 17 Groat Market.
NORTHAMPTON—Mr. John Bingley, F.C.S., Bailiff Street.
NORWICH—Messrs. Smith & Sons, 44–48 Magdalen Street.
SHEFFIELD—Mr. G. T. Newsholme, 27 High Street.
SLIGO—Mr. H. BOYERS, 20 Knox Street.
SOUTHAMPTON—Messrs. Randall, Sloper & Co., Lansdowne Buildings.
YORK—Messrs. Raimes & Co., 13 Micklegate.

"LIVE, and LET LIVE."

THE FRAME FOOD CO., LTD., desire that all retailers should have a reasonable, living profit on the sale of "**Frame Food" Preparations.** To ensure this they have fixed minimum retail prices, below which they will not permit their goods to be sold. They also give no **graduated discounts** on large orders, but allow their **highest discount** on purchases of **£2** value and upwards, thus placing all retailers upon the same terms.

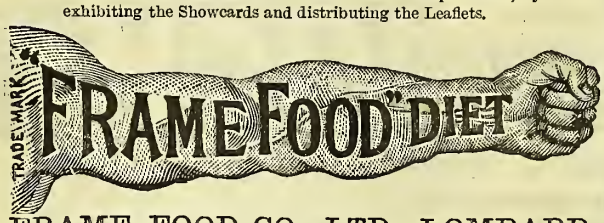
Goods sent carriage **forward.** No Packages charged or to return.

These terms ensure an average **Profit of over 30 per cent.** on goods sold at advertised prices, and of **20 per cent.** at minimum prices.

Write for Trade Terms and Anti-cutting Agreement.

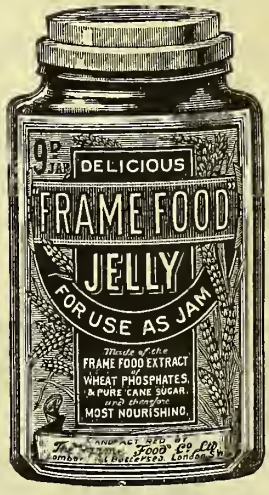
Satisfactory references or cash required for new customers.

An Attractive FRAMED SHOWCARD, and Leaflets with Retailer's printed Address (in red ink), sent Carriage Free on application—(MENTION THIS PAPER). The **Frame Food Co.** trust that retailers will show their appreciation of the Company's efforts to ensure them a reasonable profit on the sale of "Frame Food" Preparations, by exhibiting the Showcards and distributing the Leaflets.



New & Improved Package.

LARGER PROFIT TO RETAILERS.



THE FRAME FOOD CO. have adopted a new air-tight covered Jar for "Frame Food" Jelly, which will ensure its keeping any length of time. In fixing the Retail and Trade Prices of the new package, they have taken the opportunity of securing a larger margin of Profit to Retailers, who will find it to their advantage to recommend the Jelly to their customers.

The 1s. and 7d. sizes are now withdrawn.

"Frame Food" Jelly possesses the nutritive and digestible properties of Malt Extract, and is much cheaper and more palatable.

Advertised Retail Price, 9d.;
Minimum Retail Price, 8½d.

TRADE TERMS ON APPLICATION.

FRAME FOOD CO., LTD., LOMBARD RD., BATTERSEA, LONDON, S.W.

VINACOCA.

Sold in Bottles at 3s. 6d. each, or 40s. per dozen, Retail.

ALSO

COCA LIQUEUR

The best Restorative,
The best Nerve Tonic,
The best Renewer of Health is

ROLLAND'S COCA LIQUEUR.

Sold in Fancy Wickered Bottles, 7s. 6d. each, Retail.

COCA is prepared in various forms: COCA WINE, COCA LIQUEUR, COCA LOZENGES, COCA TABLETS, COCA ELIXIR, COCA TEA, COCA CHOCOLATE, COCA TOBACCO, &c.

SOLE PROPRIETORS OF

THE NEW VAPORISER, "OUR OWN."

ENGLISH MADE.

Prices from 15s. each; Eau de Lis 2s. 6d. per bottle.

Usual Trade Discount. Pamphlets for distribution, carriage paid.

FULL PARTICULARS FROM

THE FRENCH HYGIENIC SOCIETY, 6 CONDUIT STREET, REGENT STREET, LONDON, W.

Special Lines. . .

. . New Year's Offer.

Liquorice.

CATANZARO ... 1/1 per lb.
28 lbs., 1/-; Cwt., 11d.
2-cwt. Cases, 76/- cwt.

We claim for "Catanzaro" Juice that it is equal, if not superior, to any of the higher-priced brands.

CATANZARO LIQUORICE.—We have tested it with the view of ascertaining whether it contains any added material or diluent, but neither of these could we detect. As far as analysis can tell it is the pure liquorice juice which the manufacturer claims it to be. We can commend the juice to the attention of manufacturers as well as retailers who desire a pure liquorice juice at a moderate price.—CHEMIST AND DRUGGIST.

Beef Extract.

Our own special import.
Finest quality procurable.
Guaranteed weight.
Buyer's own name on label.

½-oz.	pots	...	...	...	...	dozen	3/2
1	,,	...	...	...	...	,,	4/9
2	,,	...	...	...	...	,,	8/6
4	,,	...	...	...	...	,,	15/3
8	,,	...	...	...	...	,,	28/6
16	,,	...	...	...	...	,,	52/-

TRADE MARK.

LORIMER & Co.

BRITANNIA ROW,

ISLINGTON, LONDON, N.

Peptonised Van Steen's ABSOLUTE Cocoa
PATENT No. 23503

Monopoly between the Chemist & Patentee.

SOLD IN 1-lb. TINS AT 4/-
" ½-lb. " " 2/1
" ¼-lb. " " 1/2

It will certainly pay you to stock this preparation, as it will be well advertised to the public, and not retailed by anyone but Dispensing Chemists and Druggists.

GROCERS AND STORES WILL NOT BE SUPPLIED—THEREFORE NO CUTTING.

The Cocoa itself is of exceptional quality, with all the necessary fat abstracted; and to this is added, by special process, the finest quality of Pancreatin and Bicarbonate of Soda. After some years' experience, with the assistance of eminent Doctors and Pharmaceutical Chemists, it is made in that way, so that the consumer tastes only the Cocoa;

And, as a recompense for their united work, it is the Patentee's decision not to bring it into the hands of the Grocer.

Terms and further particulars can be obtained of the following Wholesale Houses:—Messrs. BARCLAY, EDWARDS, HOVENDEN, LYNCH, SANGER, and SUTTON, London; GOODALL, BACKHOUSE & CO., Leeds; WOOLLEY, SONS & CO., Manchester; EVANS, GADD & CO., Exeter.

CONCENTRATED
PEPTONISED COCOA AND MILK
AND
CONCENTRATED PEPTONISED MILK.
(PATENT.)

These two preparations are made with pure rich PRE-DIGESTED Country Milk, and, by mere dilution with hot water, afford a delicious restorative beverage, the assimilation of which requires no digestive effort.

SAVORY & MOORE, LONDON.
Tins, 2/6. Half-tins (samples), 1/6. Obtainable Everywhere.

GUEST & CO.
CITY WORKS, CARRUTHERS STREET, MANCHESTER.

MAKERS OF MEDICATED LOZENGES AND JUJUBES.

B.P., T.H. Ph., and General Proprietary Lozenges. Finest Gum Jujubes and Pastilles—Glycerine and Black Currant, &c. Granular and all other Effervescing Preparations. Boiled Sugars, Floral Tablets.

SEND FOR LIST, SAMPLES, AND COMPARE.
TELEPHONE 235. TELEGRAMS "GUESTO."

JAMES BURROUGHS S.V.R. 65 o.p. 60 o.p.
CALE ST., CHELSEA, S.W.
and Methylated Spirit
AT LOWEST PRICES.
WRITE FOR QUOTATIONS.

A. MILLAR & CO., LTD., DUBLIN.
PURE ORANGE WINE
(VINUM AURANTII, B.P.), prepared in strict accordance with the Formula of the British Pharmacopœia.

DR. TIBBLES' VI-COCOA

THE WHOLESALE PRICE.

RETAIL PRICE.	PER DOZEN.
6d. Packets (Two Dozen in a box)	5/=
9d. Tins (Two Dozen in a box)	7/6
1/6 Tins (One Dozen in a box)	15/=

DISCOUNTS.

5 per cent. Discount on Orders up to £5.
7½ per cent. Discount on Orders for £5 and upwards.
Terms—Cash within 7 days.
Carriage Paid on Orders value £2 and upwards.

N.B.—The above Discounts are from 3¾ to 6¼ per cent. better than can be obtained from any other source, whilst the merits of DR. TIBBLES' VI-COCOA are far greater than any other similar preparation in the world.

LIMIT OF CUTTING.

The Proprietors hereby give notice to the Trade that the limit of "cutting" prices of DR. TIBBLES' VI-COCOA has been fixed as under:—

6d. Packets	to be sold	at	not less	than	5½d.
9d. Tins	,,	,,	not less	,,	8½d.
1/6 Tins	,,	,,	not less	,,	1/4½

Full Prices to be obtained wherever possible.

FURTHERMORE,

Any Chemist, Grocer, or Stores cutting below these prices will be refused supplies direct from ourselves. And in this connection it is important to note that in £5 lots and upwards no trader in the kingdom, "Wholesale or Retail," can obtain more than the 7½ per cent. discount we offer.

Read the foregoing, send your order to

DR. TIBBLES' VI-COCOA Ltd.,

SUFFOLK HOUSE, CANNON ST., LONDON, E.C.

And obtain your fair share of the profits that are daily being made by our customers everywhere.

Do you require Petroleum Jelly?

If so, SNOWDON'S PETROLEUM JELLY, White or Yellow, is the best and purest obtainable. It fulfils all the requirements of the B.P., is pronounced by the Medical Profession to be unsurpassed, and DR. S. RIDEAL, D.Sc. Lond., F.I.C., F.C.S., states that the various kinds are of "uniform good quality."

Have you seen our New Speciality in Petroleum Jelly?

The "SNOWDRIFT" (Regd.) BRAND is of a tough or stringy consistency, and is highly commended by *The Hospital*, which says of it "That its tough or stringy nature is a great improvement. We learn that already the demand for the "Snowdrift" Brand is very great. It is cheaper than ordinary vaseline, and we confidently recommend it to the Medical Profession." Samples and Prices will be sent on application.

Send for a Sample of "Snowdrift."

Address SNOWDON, SONS & Co., Millwall, London, E.
Telegraphic Address: "SNOWDRIFT, LONDON."
Telephone: 5127.

TRY IT IN YOUR BATH.

SCRUBB'S Cloudy Household AMMONIA

MARVELLOUS PREPARATION.

Refreshing as a Turkish Bath.
Splendid Cleansing Preparation for the Hair.
Allays the Irritation caused by Mosquito Bites.
Restores the Colour to Carpets.
Of all Chemists, Etc.

Invaluable for Toilet Purposes.
Removes Stains and Grease Spots from Clothing.
Invigorating in Hot Climates.
Cleans Plate and Jewellery.
1s. Bottle for six to ten baths.

SCRUBB & CO., 32b Southwark Street, London, S.E.
MANUFACTURERS OF SCRUBB'S ANTISEPTIC SKIN SOAP.

BUY YOUR SPONGES FROM THE DIRECT IMPORTERS.

CONTRACTORS TO HER MAJESTY'S GOVERNMENT.

Auxiliary Warehouses and Bleaching Works—COLLINGWOOD STREET, CITY ROAD,
Telegrapic Address—"DAQUEZ LONDON." TELEPHONE No. 11097.

I. & M. COHEN,

SPONGE MERCHANTS, IMPORTERS & EXPORTERS.

SPONGES.—Sponges of every description, and for all purposes, always in stock, at *lowest market prices*. Packed to suit Customers' requirements, in Cases, Boxes, Baies, on Cards, Strings, Bone Handles, &c., Natural or Bleached; also in Original Packages as received from *our Buyers at all the Sponge Fisheries*.

ALL COMMUNICATIONS TO 53 & 54 HOUNDSDITCH and 66 ST. MARY AXE, LONDON, E.C.

'HYPATIA'

THE NEW TOILET SOAP.

HUGGINS' SOAP WORKS, Lim., are now appointing Agents amongst respectable Chemists in all the leading towns in the United Kingdom.

Unprecedented favourable terms to the first Three Hundred appointed.

Apply, HUGGINS' SOAP WORKS, LIM.

City Offices—77 KING WILLIAM STREET, LONDON, E.C.

Arsenical Soap.

Jameson's.

The Proprietor of the above preparation calls the attention of the Chemists of the United Kingdom to the decision given at Brentford, on Saturday, 12th December, 1896, in which it was held that the presence of Arsenic, even the minutest quantity, was sufficient to exempt dealers from prosecution under the Food and Drugs' Act.

In the manufacture of **Jameson's Arsenical Complexion Soap** the machinery is so perfect that not only is Arsenic to be found in each tablet, but severe testing has shown that the percentage is also uniform, and consequently each and every tablet may be sold with the utmost assurance; and in order to make the trade feel as confident as does the Proprietor, he takes this opportunity of informing them that he will in every instance defend them and indemnify them should action (which after the judgment quoted is not very likely) be taken against them; and, further, he is prepared to give them a warranty with each delivery of the Soap, which the trade has only to show to the authorities to immediately quash the indictment.

It is not for the Proprietor of **Jameson's Arsenical Complexion Soap** to instruct the trade as to the manner in which it shall conduct its business, but he takes this opportunity of declaring that he will, after this notice, defend any Chemist against prosecution under the Pharmacy Act, provided he has himself fulfilled the statutory obligations.

Please note that holders of **Jameson's Arsenical Complexion Soap** are requested to send a Post Card notifying the same, and a warranty, which, as before stated, is a certain protection against prosecution, will, with a supply of labels for complying with the Pharmacy Act, be forwarded per return.

W. JAMESON, 92 Newington Butts, London, S.E.

A WORD TO DANCERS.

BALL ROOM FLOOR POLISH!

A nice granulated preparation supplied in tins with sprinkler tops at

ONE SHILLING EACH.

WILL PRODUCE A GLOSS ON ANY FLOOR.

Does away with the Labour of Waxing!

Should be sprinkled lightly on the floor.

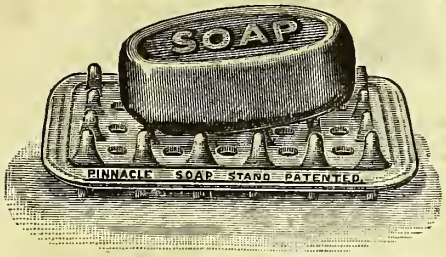
THE ACTION OF THE DANCERS WILL DO THE REST.

7/- per doz., 20/- per 3 doz., 72/- per gross, net, carriage paid on receipt of remittance.

BLEASDALE, LIMITED, YORK.

THE

PINNACLE SOAP STAND CO.



65 Frith St., Soho Square,
LONDON, W.

Or of all Wholesale Firms in England.

For PREVENTING
Toilet and other Soaps from Absorbing Moisture and Gelatinising after using.

TOILET SOAP ALWAYS DRY AND PLEASANT TO USE.

Prize Medal Awarded, Manchester, April 1894.

It is a well-known Fact that about 50 per cent of Soap is lost by not being allowed to thoroughly dry after each time it is used, generally being laid in a dish, where it softens and forms jelly; consequently is wasted, and rendered most unpleasant to handle.

This invention allows the air to circulate all round the tablet of Soap to harden it, and prevents it from adhering to the dish; therefore it is easily picked up, always dry and pleasant to use.

Being made of rubber, it is almost indestructible, and will last for years.

It is made in three shapes, Oval, Round, and Square, to fit any soap-dish, or can be used on lavatory slab or bath without dish.

EACH PINNACLE IS SUPPLIED IN A NEAT CARDBOARD BOX.

THE "CHEMIST AND DRUGGIST" WINTER ISSUE

Will be Published on JANUARY 30, 1897.

Firms desirous of sending out Price Lists or Circulars with this Number should communicate at once with

THE PUBLISHER, 42 CANNON STREET, LONDON, E.C.

Price's Glycerine

GREATLY REDUCED IN PRICE.

Absolutely free from Arsenic and all other Impurities. Is Odourless and Pleasant to the Palate.

MANUFACTURED ONLY BY

PRICE'S PATENT CANDLE CO.

LIMITED,

LONDON, LIVERPOOL, & MANCHESTER.

18

SALVO PETROLIA

A SUPERIOR VASELINE.

May be procured through all Chemists and Druggists, and is Manufactured solely by the Proprietors,

THE DEE OIL COMPANY,

LIMITED,

Works: SALTNEY, CHESTER.

SALVO PETROLIA

Sanctioned by the Board of Trade Marine Department, and included in their instructions issued May, 1894, to superintendents of Mercantile Marine Offices.

Manufactured in five distinct qualities—WHITE, LEMON, YELLOW, GOLDEN, and RED (Veterinary).

Packed in tins 1, 2, 4, 5, 7, 10, 14, and 28 lbs., 56 and 112 lb. Drums, and 3 cwt. Barrels.

OLEUM DEELINÆ

(REGISTERED).

GENERALLY ADOPTED BY THE MEDICAL PROFESSION FOR

Ophthalmia, Scurvy, Ringworm, Eczema, and all Skin Diseases.

Packed in Cases—One dozen 1*s.* Bottles; One dozen 2*s.* Bottles. Pint Bottles 4*s.* 6*d.* each, for Hospitals and Dispensing Chemists. Testimonials may be had upon application.

CORBYN'S

QUADRUPLE and TRIPLE EXTRACTS.

NATURAL PERFUMES.

Toilet Waters. Sachet Powder.

CORBYN, STACEY & CO.

Pharmaceutical Laboratory and Drug Warehouses { 300 HIGH HOLBORN. 61 and 62 EAGLE STREET.
Perfume Laboratory and Warehouse - - 7 FISHER STREET.
Analytical Laboratory - - - - - - - 8 FISHER STREET.

All Letters should be addressed to the HEAD OFFICE—

22 GREAT ST. HELEN'S, LONDON, E.C.

Telegraphic Address: "COLOCYNTH LONDON."

TELEPHONE No. 4033.

The Best Hair Remover.

DEPILENE

Reaches the Root.

Removes superfluous hair without injury to the skin. Speedy and sure. No mixing. Dispenses with Electrolysis. To be obtained, elegantly prepared, and packed free from observation, with directions, post free 4/3 per bottle, of

THE DEPILENE CO.
QUEEN'S FERRY, FLINTSHIRE,
Or of **MARSHALL & CO.**
30 Newgate St, London, E.C.

Special Terms to Chemists.

ALEXANDRE, 30 Westbourne Grove, LONDON.

SHADEINE.

[COPYRIGHT]

For Colouring the Hair. Sold in 6 tints, one liquid.

6d. Sample size .. 4/- per doz.
3/6 Large " .. 28/- "
10/6 Extra " .. 84/- "

One dozen Samples on pretty Show Card, 4/-

☛ **These Popular Articles are Largely Advertised, and kept at all Wholesale Houses.**

Agents Wanted.

ALEXANDRE
Westbourne Grove, LONDON.

DIAMOND EMERY CO.

(LIMITED).

DIAMOND BRAND.

MANUFACTURERS OF

EMERY STONE	EMERY CLOTH
EMERY CORN (all sizes)	GLASS PAPER
EMERY RUBBERS	GLASS CLOTH
EMERY FLOUR	GROUND GLASS
EMERY PAPER	KNIFE POLISH

POLISHING PASTE & ALL POLISHING MATERIALS

Works: Garston Docks.

Head Office—**136 THE ALBANY, LIVERPOOL.**

BRECKNELL'S SKIN SOAP.

PRIZE MEDAL.

Recommended by Eminent Medical Men.

Unscented, yet Sweet as a Rose.

Although low in price, it ranks with high-class soaps, and is altogether the best extant for producing a Clear and Healthy Skin.

☛ The longer it is kept the more it improves and increases in value.

LIBERAL TERMS TO THE TRADE.

BRECKNELL, TURNER & SONS, LIMITED,
To Her Majesty, &c., &c.
31 HAYMARKET, LONDON.
ESTABLISHED 1862.

SPECIAL NEW LINE

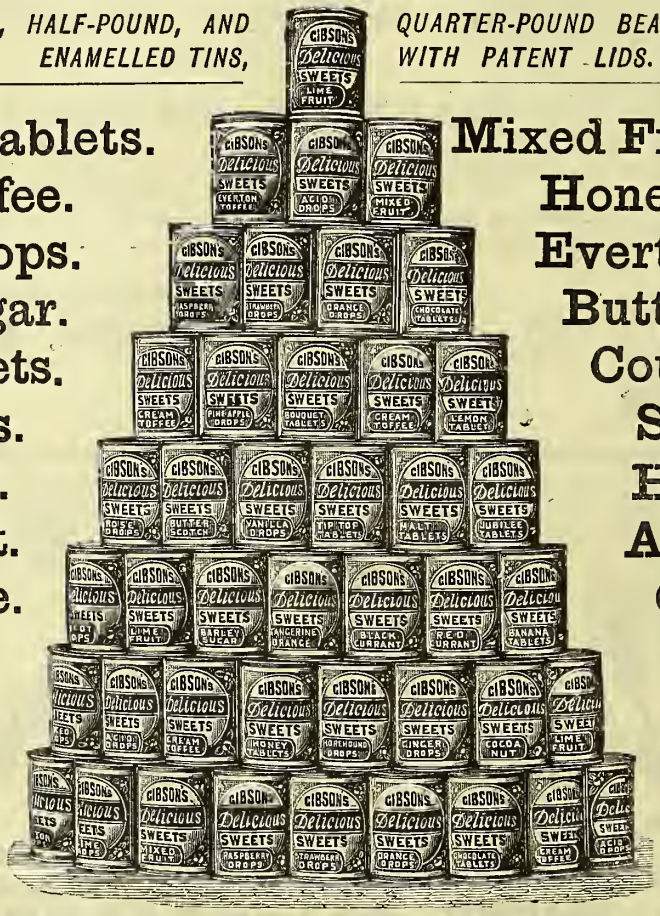
IN

GIBSON'S

CELEBRATED SWEETS.

ONE POUND, HALF-POUND, AND QUARTER-POUND BEAUTIFULLY ENAMELLED TINS, WITH PATENT LIDS.

Bouquet Tablets.
Cream Toffee.
Lemon Drops.
Barley Sugar.
Malt Tablets.
Pear Drops.
Mint Rock.
Lime Fruit.
Pine Apple.
Raspberry.
Damson.
Ginger.
Musk.
&c., &c.



Mixed Fruit Drops.
Honey Tablets.
Everton Toffee.
Butter Scotch.
Cough Drops.
Strawberry.
Horehound.
Acid Drops.
Greengage.
Chocolate.
Orange.
Cherry.
Rose.
&c., &c.

For many years these goods have been shipped abroad only in bottles; now the firm have decided to pack them in 1-lb., ½-lb., and ¼-lb. tins at 7/6, 4/6, and 2/9 per dozen respectively to the Retail trade, with usual discount, special terms being made with Wholesale buyers. Messrs. Gibson & Sons believe by offering their **WORLD-RENOWNED BOILED SUGARS** in portable, unbreakable packages, beautifully labelled for Counter show, they will not only enormously increase their own business, but supply a long-felt want to buyers abroad, and remove at once the only obstacle standing in the way of everybody being able to stock these goods without the slightest fear of sustaining any personal loss.

Indents may be filled and sent direct to the Works, MANCHESTER, to the Firm's LONDON WAREHOUSE—

1 GLASSHOUSE YARD, ALDERSGATE STREET,

Or to any LONDON SHIPPERS.

PETER TYRER'S SAUCES

WORCESTER, READING, HARVIE, YORKSHIRE, AND "BOROUGH" KETCHUP.

SILVER MEDAL.

	Per gross.	Extra quality.
1d. Sample Bottles, dozen parcels	5/3	6/3
" " ½-gross boxes	5/9	6/9
1d. Giant " dozen parcels	6/-	8/6
" " ½-gross boxes	6/6	9/-

	Per gross.	Extra quality
¼ Bottles, flat or round, reputed half-pints	16/-	28/-
½ " " " pints	26/-	38/-
1 Pint Imperial, round stoppered bottles	52/-	62/-
12½-Gallon Casks (*casks free*) each	20/-	32/-

ROYAL CAFE SAUCE, a Rich Fruity and Exquisite Flavour.

Square Glass Stoppered Bottles, containing nearly ½-pint Imperial, 42/- per gross. Sample Bottles at 7/- per gross.

MANUFACTORY — 30 SOUTHALL PLACE, LONG LANE, BOROUGH, LONDON, S.E.

CHIEF SCOTCH AGENCY — West Nile Street, GLASGOW.

Profitable Extras for Chemists.

TOBACCO, CIGARS, CIGARETTES.

AND TOBACCONISTS' FANCY GOODS.

All Packet Tobaccos, Cigarettes, and other Tobacconists' Proprietary goods supplied at Manufacturers' own List Prices. Every Smoker's Requisite and all Novelties—Up to Date—in one order.

MINIMUM OF TROUBLE—MAXIMUM OF PROFIT.

SEND FOR ILLUSTRATED PRICE LIST (200 PAGES), POST FREE.

SINGLETON & COLE, BIRMINGHAM.

VIN-KAFRA

"TONIC of TONICS."

STIMULATES without REACTION.

34s. per dozen Bottles.
Retail 3/6 per Bottle.

CAN BE OBTAINED FROM ALL WHOLESALE HOUSES.

The Mead Manufacturing Co.

156 & 157 Aldersgate St., E.C.

FOR INFANTS AND INVALIDS.

KYDDE'S FOOD

IS UNEQUALLED.

KYDDE & CO.

10 SOUTHWARK BRIDGE ROAD, LONDON, S.E.

IRISH HONEY

AND BEESWAX.

We offer Irish Honey in Kegs of about 80 lbs. net.

Single Kegs at	..	56/- per cwt.
Five "	..	55/- "
Ten "	..	54/- "

14-lb. Self-opening Tins, 2/- per cwt. extra.
7-lb. " " 3/- " "

The quality is very fine this Season. Some Honey of 1894 and 1895 at 32/- per cwt.

Beeswax, warranted genuine, at £9 per cwt.

Cash Discount, 2½ per cent. Packages free.

GEORGE WHITE & SONS, WATERFORD.

S. MAW, SON & THOMPSON'S
CHEST PROTECTORS AND VESTS
For Shielding the Lungs.

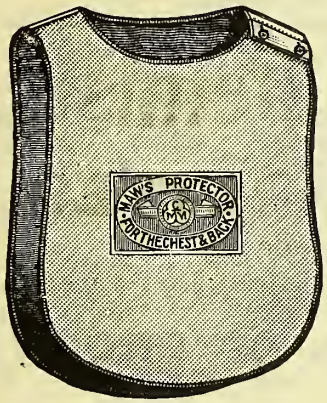


FIG. 3.
Double, for the Chest and Back.

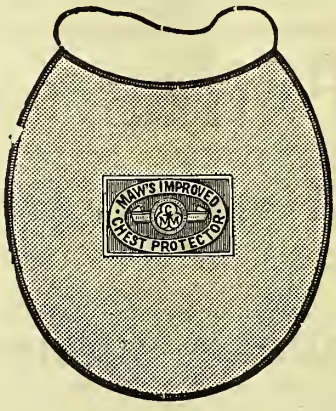


FIG. 4.
Single, Chest Protector.

FIG. 5.
Vest, a Shield for the Lungs.

CHAMOIS AND FLANNEL (Plain or Perforated.)

				No. 1	No. 2	No. 3	No. 4	No. 5
Fig. 3.	Double	...	... per doz.	19/	25/	31/	38/	46/
Fig. 4.	Single	...	... "	8/9	11/	13/	15/	19/
Fig. 5.	Vests	...	... "	26/	33/	40/	49/	57/

FELT.—*SCARLET, WHITE, NATURAL UNDYED WOOL, OR ASSORTED.*

				No. 1	No. 2	No. 3	No. 4	No. 5
Fig. 3.	Double, best...	...	per doz.	16/	22/	27/	32/	44/
	Ditto, second	...	"	14/	18/	23/	28/	37/
Fig. 4.	Single, best ...	...	"	7/6	9/	10/6	14/	19/
	Ditto, second	...	"	6/	7/6	9/	11/	16/
Fig. 5.	Vests	...	"	17/	22/	27/	33/	40/

S. MAW, SON & THOMPSON, LONDON.

Telephone Number, 1852. Telegraphic Address—CHEMICUS LONDON.

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Tyrer, T., & Co.
White, A., & Sons
Woolley, Sons & Co.
Wright, Layman & Umney

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Hatrick & Co., Lim. ("Rack")
Lynch & Co., Lim.
Sanger & Son | Wood, Vincent

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Delbanco & Co.
Fletcher, Fletcher & Co.
Goodall, Backhouse & Co.
May & Baker, Lim.
Newball & Mason
Stevenson & Howell
Todd, A. M.
Tyrer, P. (Anchovies)
Woolley, Sons & Co.

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Boehm, Fredk.
Bush, W. J., & Co.
Delbanco & Co.
Evans, Sons & Co.
Feustell, Friedrich
Jakson, J., & Co.
Kahler, G., & Co.
Lewig, Mark, Lim.
May & Baker, Lim.
Poppelreuter, W.
Ransom, Wm., & Sons
Sanitas Co., Lim.
Stevenson, H. E., & Co.
Stevenson & Howell
Symes & Co. | Todd, A. M.
Warrick Bros.
Wright, Layman & Umney

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Tasmanian Eucalyptus Oil Co.

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Burgoyne, Burbidges & Co.
Davies, Gibbins & Co.
Evans, Sons & Co.
Fletcher, Fletcher & Co.
Hearon, Squire & Francis
Hooper, B., & Co.
Lloyd, T. Howard, & Co.
Moss & Co.
Parke, Davis & Co.
Potter & Clarke
Randall & Son
Ransom, W., & Son
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Liebig Co.
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Randall & Son
Ransom, W., & Son

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Hearn, Wright & Co.
Hovenden & Sons
Kilner Bros.
Lynch & Co., Lim.
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Maw, S., Son & Thompson
May, Roberts & Co.
Shirley Bros. | Youlden, E.

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Mawson Filter Co.

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Ford, Shapland & Co.
Maw, S., Son & Thompson
Strong, Christy
Tunbridge & Wright

FOOD (Infants' & Invalids')
Allen & Hanburys
Benger's Food
Bragg, J. L.
Brand & Co.
Christy, T., & Co.
Frame Food Co., Lim.
Goodall, Backhouse & Co.
Hawksley, T. (Steriliser)
Horlick & Co.
Kydde & Co.
Liquor Carnis Co.
Liebig Co. | Lorimer & Co.
Mellin's Food | Nestlé, M.
Savory & Moore
Tyrer, P.
Vi-Cocoa (Dr. Tibbles)
Vimbos

FUNNELS
Von Poncet Glass Works

GELATINES
Boehm, F.

GINGER ALE
Bratby & Hinchliffe, Lim.
Chemists' Aerated & Mineral Water Association, Lim.
Ellis & Son
Mills, R. M., & Co.

GLYCERINE
Blyton, Astley & Co. (Pastilles)
Boehm, F. | Fink & Co.
Price's Candle Co., Lim.

GRANULAR PREP.
Bishop, A., & Sons
Blyton, Astley & Co.
Boulton, J., & Co.
Davies, Gibbins & Co.
Evans, Sons & Co.
Hearon, Squire & Francis
Lloyd, T. Howard & Co.
Tyrer, T., & Co.
Wright, Layman & Umney

GUM
Fink & Co. (Arabic, &c.)
Graf, F.

HAIR PREP.
Alexandre's Shadeine
Brooks, Tom
Chesebrough Co.
Depilene Co.
Edwards & Co.
Thiellay, E. H.
Truefitt, H. P., Lim.

HERB BEER EXTS.
Adams, B.
Newball & Mason
Potter & Clarke

HOMŒOPATHIC
Keene & Ashwell
Leath & Ross
Watson & Wates

HONEY
White, G., & Sons

HYPOPHOSPHTES
Duncan, Flockhart & Co.
Fellows
Fletcher, Fletcher & Co.
Symes & Co.
Tyrer, T., & Co.

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Arema Manufacturing Co.
Booth's Hyomei
Burroughs, Wellcome & Co.
Lynch & Co., Lim.
Martindale, W.
Sanitas Co., Lim.

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Barclay & Sons, Lim.
Bleasdale, Lim.
Jackson, T.
Sanitas Co., Lim.
Tunbridge & Wright

JELLOIDS
Warrick Bros.

KETCHUP
Tyrer, P.

LARD
Ewen, J., & Sons

LAVENDR WATR
Jakson, J., & Co.

LEECHES
Fitch & Nottingham

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Burgoyne, Burbidges & Co.
Christy, T., & Co.
Liverpool Lint Co.
Maw, S., Son & Thompson
Newsome, C.
Robinson & Sons

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Cavies, Gibbins & Co.
Fletcher, Fletcher & Co.
Lloyd, T. Howard, & Co.
Moss, John, & Co.
Oppenheimer, Son & Co., Lim.
Sinclair, Phillips & Co.
Stevenson, H. E., & Co.

LIQUORICE
Evans, Sons & Co. (Savarini)
Hillaby, J.
Lorimer & Co.
"Solazzi"

LOZENGES
Allen & Hanburys
Davies, Gibbins & Co.
"Frog in your Throat"
Gibson, R., & Sons (Manfrs.)
Guest, T., & Co., Lim.
Hill & Son | Lorimer & Co.
Raimes & Co. | Randall & Son
"Solazzi" | Warrick Bros.

LUNG PRESERVRS
Zimmer, G.

MACHINERY
Bennett, Sons & Shears, Lim.
Gardner, W.
Melin, C. | Pindar, J. W.
Volcanic Aeration Co.
Werner, Pfleiderer & Perkins, Lim.

MALT EXTRCT, &c
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Anderson & Co.
Blackwell, Hayes & Spilsbury
Burroughs, Wellcome & Co. (Kepler's)
Davies, Gibbins & Co.
English Diastasic Malt Extract Co., Lim.
Hearon, Squire & Francis
Lorimer & Co. | Moss, J., & Co.
Oppenheimer, Son & Co., Lim
Parke, Davis & Co.
Raimes & Co.
Raimes, Clark & Co.
Robinson & Co.
Standard Malt Ext. Co., Lim.

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Davies, Gibbins & Co.
Evans, Gadd & Co.
Evans, Sons & Co.
Henry, T. & W. (Calcined)
Hill, A. S., & Sons
Lloyd, T. Howard, & Co.
Washington Chemical Co.

MANICURE
Hovenden & Sons

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Day & Sons (Veterinary)

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Christy, T., & Co.
Evans, Lescher & Webb
Maw, S., Son & Thompson
Shirley Bros. | Tyrer, P.

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May & Baker, Lim.
Tyrer, T., & Co.

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Jones & Co. | Phillips, G., & Co.
Smith, S., & Co.
Warren, A. & J.

METHYLENE
Robbins, J., & Co.

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Hicks, J. J.

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Horlick & Co.
Nestlé, H. (Condensed)

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Smith, Bertie, & Co.
Smith, T. & H., & Co.

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Celladema
Chesebrough Co. (Vaseline)
Davies, Gibbins & Co.
Lloyd, T. Howard, & Co.
Stevenson, H. E., & Co.

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Raphael, J., & Co.

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Warrick Bros.

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Atkinson & Barker (Infant Preserv.)
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Cullwick's Blood Tablets
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Holloway (Pills and Oint.)
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Burgoyne, Burbidges & Co.
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Mackey, Mackey & Co.
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Moss, J., & Co.
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Smith, W. F.
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Symes & Co.
Tyrer, T., & Co.
White, Alfred, & Sons
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Beecham, Thomas
Bleasdale & Co., Lim.
Blyton, Astley & Co.
Box, W. H.
Davies, Gibbins & Co.
Duncan, Flockhart & Co.
Evans, Gadd & Co.
Hearon, Squire & Francis
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Krewel & Co.
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McKesson & Robbins
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Potter & Sacker
Scott, S., Dr.
Wand, S. (Pearl Coated)
Warner, W. R., & Co. (Coated)
Wyleys, Lim.

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Metz, Paul

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Harrison & Waide
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Kühn, B.
Zimmermann, A. & M.

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Potter & Clarke

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Tyrer, P.

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Glasgow School of Pharmacy
Liverpool School
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Metropolitan Col. of Pharmacy
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North of England School
Northern College of Pharmacy
Royal Dispensary (Edinburgh)
Sheffield College of Pharmacy
South London School of Pharmacy, Lim.
The School of Pharmacy
Westminster College

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May, Roberte & Co.
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Truffitt, H. P., Lim.

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Jeyes' Sanitary Compounds Co.
Kühn, B. (Kresochine)
Ness & Co.
Sanitas Co., Lim.

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Bowling & Govier
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Josephs, Philip
Treble, G., & Son
Yates, W. S.

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Fassett & Johnson
Gibbs, D. & W. (Medicated)
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Jameson, W. (Arsenical)
Jeyes' Sanitary Compounds Co.
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Mackenzie's, Dr. (Arsenical)
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Muhlens, F.
Pears, A. & F., Lim.
Sanitas Co., Lim.
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Barclay & Sons, Lim. [Co.
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Krohne & Sesemann
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Powell & Barstow
Quelch, H. C.
Reynolds & Branson
Robinson & Sons
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Schutze, F., & Co.
Victoria Rubber Co
Wood, Vincent

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Bratby & Hinchliffe, Lim.
Chemists' Aerated and Mineral Waters Association, Lim.
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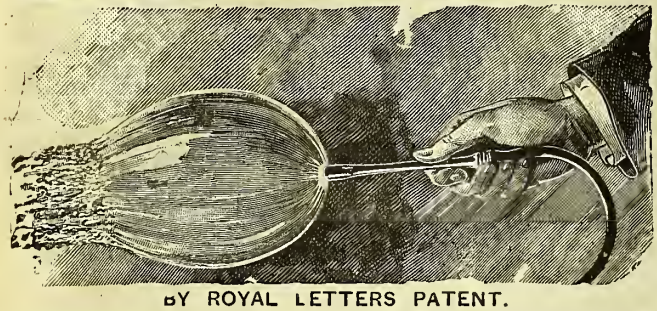

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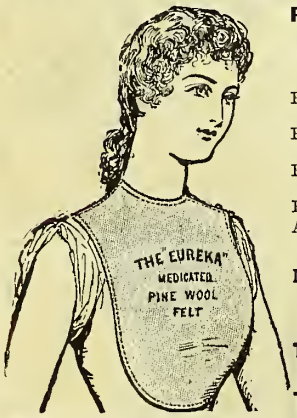

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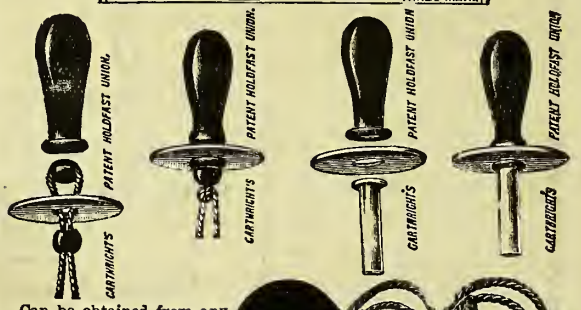

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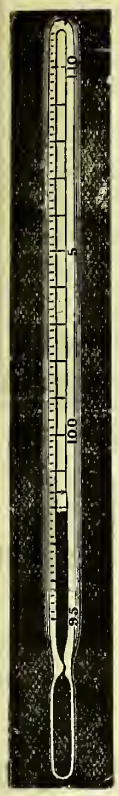


Hicks's Celebrated "Non Plus Ultra" Clinical Thermometer.

VERY WIDE DEGREES.

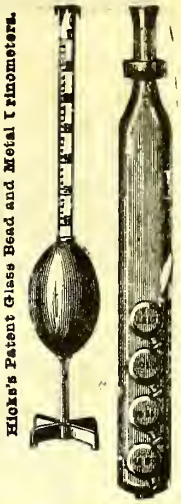
JAMES J. HICKS

WHOLESALE MANUFACTURER OF ALL KINDS OF

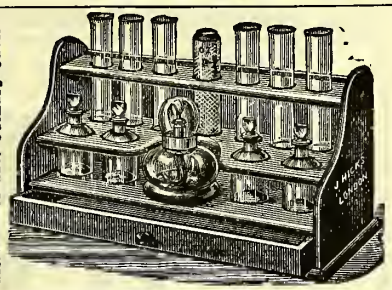
OPTICAL, METEOROLOGICAL, & SCIENTIFIC INSTRUMENTS.

Hicks's New Clinical Thermometer, "THE CLIMAX."

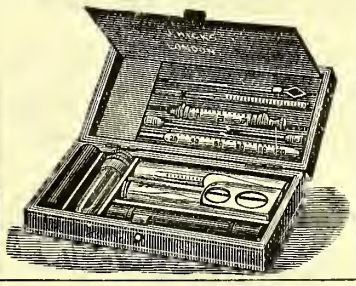
The Scale and figures, instead of being cut IN the Glass, are inserted INSIDE THE BODY OF THE THERMOMETER. They can therefore never be effaced, and no dirt or infection can touch them. ABSOLUTELY PERFECT.



Hicks's Patent Glass Bead and Metal Trinometers.



Hicks's Portable Urinary Case.



Hicks's Portable Urinary Case.

Hicks's Celebrated Opaque Glass Measures. Very easy to read in any light.

Send for Illustrated Price List, which contains the following celebrated Thermometers:—

HICKS'S PATENT "CLIMAX" CLINICAL.	HICKS'S PATENT "NON PLUS ULTRA" CLINICAL.
" " "OPAQUE LENS" "	" " "DUPLEX" "
" " "ONE MINUTE" "	" " "FLAT FACE" "
" " "HALF-MINUTE" "	" " "FULLER-SPONG" "
" " "INSTANTANEOUS" "	" " "HOSPITAL" "
" " "RUBY BACK" "	" " "VETERINARY" "

Also General Illustrated Catalogue supplied on application to

8, 9, & 10 HATTON GARDEN, LONDON, E.C.

N.B.—When ordering please mention as advertised in "The Chemist and Druggist."

HOLLOWAY'S PILLS & OINTMENT

Have the Largest Sale of any Medicine in the World.

MANUFACTURED ONLY AT

PROFESSOR HOLLOWAY'S ESTABLISHMENT,

78 New Oxford St. (late 533 Oxford St.), London,

And sold at 1s. 1½d., 2s. 9d., 4s. 6d., 11s., 22s., and 33s. each Box or Pot. Chemists and Druggists selling "Holloway's Pills and Ointment" can, on application to the above address, or to the Wholesale House with whom they deal, be supplied free of charge with Handbills and Posters with their name and address printed at foot.

Wholesale Terms see List of "Proprietary Articles" in most Price Currents.

INDEX AND BUYERS' GUIDE

See pages 23-25

BOORD & SON,

DISTILLERS, FOREIGN WINE AND SPIRIT MERCHANTS, AND METHYLATORS,

ALLHALLOWS' LANE AND BARTHOLOMEW CLOSE, LONDON, E.C.

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FINEST ORANGE WINE FOR QUININE.

PERFECTLY PURE. WRITE FOR OUR PRICES BEFORE ORDERING.

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TINCTURE SPIRIT

60 O.P. AT LOWEST PRICES. 56 O.P.

PURE ORANGE WINE.

S V M $\frac{0}{61}$ $\frac{0}{64}$

AT LOWEST PRICES.

Special Terms to Large Buyers.

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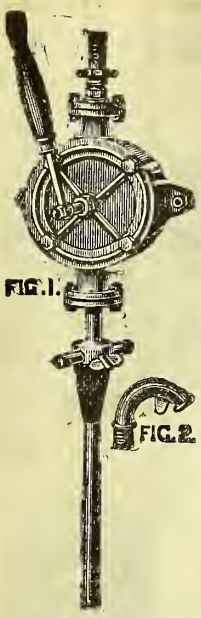

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OIL, TIME, MONEY.

THOUSANDS IN USE.

This is a representation of our "WILLCOX" NEW SEMI-ROTARY PATENT PUMP, with Improved Taper Barrel Attachment. It is easy to work and simple in construction, and is admitted to be the best article in the market for Pumping Paraffin Oil and all kinds of Liquid from barrels or tanks into other receptacles.

We hold a Large Stock, and can give Prompt Delivery.

Write for full particulars and prices of The "Willcox New Semi-Rotary" Patent Oil Pumps to

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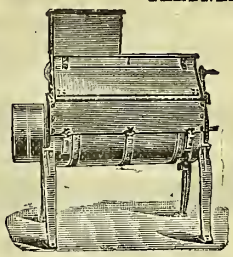

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Sifters and Mixers

Now working in Almost Every Trade where DRY POWDERS are Sifted and Mixed and Lumps Reduced. All being done at one operation.

Prices from 50/- to £90. [4]

WM. GARDNER, Engineering Works, GLOUCESTER.

STOKES'

CASH TILL.

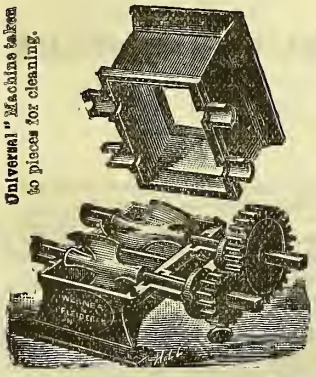
Reduced Price **47/6** *Latest Improvements.*

(Sent on Trial seven days, on receipt of two references.)

Particulars and Testimonials on application.

G. R. STOKES & CO., LTD.,

HANLEY, STAFFS.



"Universal" Machine taken to pieces for cleaning.

Size 3, Type I., for 1-lb. Mass.

THE "UNIVERSAL"

Kneading & Mixing Machine,

Used by all the largest Pill Makers.

SUITABLE ALSO FOR

OINTMENTS, POWDERS, AND MASSES of any Consistency.

PILL MASSING MACHINES.

PILL PIPERS, CUTTERS, ROUNDERS, COATERS, "SPIRAL BRUSH" POWDER-SIFTERS (WITH INTERCHANGEABLE SIEVES),

And every Accessory for the Pill Room.

WERNER, PFLEIDERER & PERKINS (LIMITED),

Head Offices & Showrooms—117 Queen Victoria St., E.C.

Works—43 Regent Square, Gray's Inn Road, W.C.

Contractors to the War Offices of all the Great Powers and other Governments.

THE WANT OF THE DAY!

NO MORE SOFT LINEN WHEN STARCHED.

Used in the Royal Laundries.

Should be used in Every House.

The Greatest Boon ever offered to the Laundress for imparting an IVORY-FINISH to Starched Linen, Laces, &c. It does not stick to spider-web-like materials.

CRITCHLEY'S STARCH GLOSS

Registered No. 40376.

Once Tried, Always Wanted.

Makes Old Linen like New.

From the Chief Laundress to H.R.H. the Prince of Wales:—West Newton, near Lynn, Norfolk, Aug. 22, 1879. SIR,—Having tried your "STARCH GLOSS," I certainly think it a great improvement—far superior to any I have tried. Yours truly, H. ELDER.

To Mr. CRITCHLEY.

Sold by Chemists and Druggists, Grocers, Oilmen, &c., in Packets at 1d., 3d., 6d., and 1s. each.

PREPARED ONLY BY

T. CRITCHLEY, CHEMIST AND WHOLESALE DRUGGIST, BLACKBURN.

LONDON DEPOT—107 WHITECROSS STREET, E.C.

A SEASONABLE LINE

AS YOUR OWN PROPRIETARY.

LIQUOR PANCREATICUS.

Glycerole of Pancreatin (Armour)	3 oz. 160 min.
Bicarbonate of Soda	300 gr.
Glycerine	1 oz.
Rectified Spirit ...	3 oz.
Distilled Water, sufficient to make ...	1 pint.

Mix.

Each fluid drachm contains 1 grain of Armour's Pancreatin.

2·5 fluid drachm will predigest one half-pint of milk at 105° F. in 15 minutes.

CREMOR MORRHUÆ PANCREATICUS.
(Peptonised Emulsion of Cod-liver Oil.)

Cod-liver Oil	10 oz.
Mucilage of Moss..	5·5 oz.
Syrup of Tolu	10 dr.
Glycerole Pancreatin (Armour)	400 min.
Glycerole Pepsin (Armour) ..	400 min.
Alcohol	10 dr.
Essential Oil of Almonds ..	20 min.
Distilled Water, sufficient to make	1 pint.

Rub the Mucilage of Moss in a mortar with the Cod-liver Oil added by degrees. Add separately the Glycerole Pancreatin, Glycerole Pepsin, and Syrup of Tolu to the emulsion, shaking after each addition. Dissolve the Essential Oil of Almonds in the Alcohol, and add the solution to the mixture, and sufficiency of distilled water to produce one pint.

ARMOUR'S

GLYCEROLE PEPSIN is the most convenient dispensing form and the most powerful fluid Pepsin, and is miscible with all liquids compatible with Pepsin in solution.

GLYCEROLE PANCREATIN.—Useful alike for preparing mixtures for internal administration or predigesting foods. This is the best form to administer for action in the stomach.

Supplies of Labels for the above, together with the latest edition of Armour's Formulary, mailed free on application.

ARMOUR & COMPANY (Chicago). LONDON, S.E.

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ANTISEPTIC DRESSINGS FACTORY,

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Where all Dressings used by Sir JOSEPH (now Lord) LISTER are made for him.

COTTON WOOL, LINT, TOW, OILED SILK, LIGATURES, SUTURES, BANDAGES.

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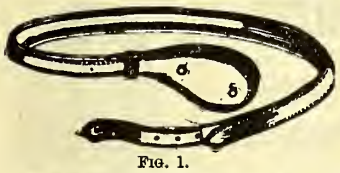


FIG. 1.

ESTABLISHED 1830.

TRUSSES.

The best and Cheapest Trusses of all kinds in the Wholesale and Export Market are manufactured by

LINDSEY & SONS.

Elastic Stockings, Suspenders, and Surgical Bandages of all kinds.
Wholesale & Export. The Largest Shippers in the Trade.
ILLUSTRATED PRICE LIST POST FREE TO ANY ADDRESS.

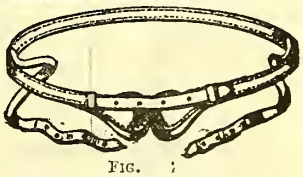


FIG. 2.

32 LUDGATE HILL, AND 40 GRACECHURCH STREET, E.C.

ESCHMANN BROS. & WALSH.

Inventors and Manufacturers of the

SOFT SILK FLEXIBLE CATHETER, GUARANTEED WITH WOVEN EYES.

To be had of all Surgical Instrument Makers and Wholesale Houses.

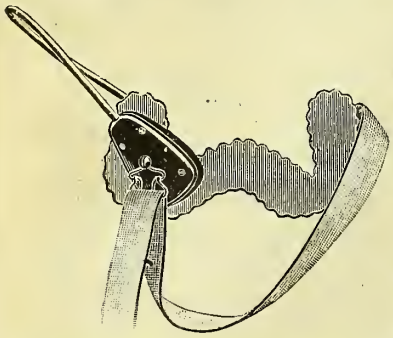
To be had of all Surgical Instrument Makers and Wholesale Houses.

THE

"WILLARDBELL" TRUSS

(Patented in the United Kingdom and the Continent.)

An Entirely New Principle. Succeeds where all others fail. Guaranteed to hold any Rupture.



Replenish your Stock with the

"WILLARDBELL" SUSPENSORIES

Material and Construction Surpassed by None.

A Flexible Aluminium Plate Front, an Adjustable Shirt String on Pouch with Adjustable Buckles.

Quality— No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Trade Price per dozen—	6/	7/	10/	15/	18/	3/6	6/6	8/	9/	8/	8/6	24/	19/	24/	12/

Sizes:—Small, Medium, and Large, corresponding with the standard established for Suspensories.

Other Specialities:—The "Willardbell" Elastic Web Trusses, "Willardbell" Suspensory, "Willardbell" Jockstrap, "Willardbell" Ladies' Sanitary Bandage, Abdominal Supports, Chest and Lung Protectors, Ladies' and Gentlemen's Shoulder Braces, Elastic Stockings, Knee Caps and Anklets, and other appliances.

NOTE.—We have no hesitation in bringing our Goods under your special notice, as they have already established a reputation amongst Doctors and Chemists as of superior quality, finish, and efficiency.

We shall be pleased to submit on application Prices and Testimonials in reference to our Goods, with any other information required.

Chemists who take up Agencies for our manufactures will considerably increase the yearly turn-over of their business. A large number of Agents have already been appointed in the United Kingdom.

We are well equipped for despatch of Export Orders, but wherever possible should prefer such to pass through the Shipping Agents in England.

MANUFACTURERS:—ACCRINGTON SURGICAL APPLIANCES CO., LIMITED, DALE STREET WORKS, ACCRINGTON. Tele. No. 76.

Sole Agents for South Africa—B. G. LENNON & CO., LTD., 75 Leadenhall Street, LONDON, E.C.

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MANUFACTURERS OF

SURGICAL INSTRUMENTS & APPLIANCES,

IN

Silver, Electroplate, Cut Sheet Rubber, &c., &c.

ALSO KNOWN AS SOLUBLE QUININE PESSARIES.

ABSOLUTELY RELIABLE.

TRADE PRICES MODERATE.

SALE UPWARDS OF 5,000,000.

BONA-FIDE MAKERS, NOT DEALERS.

MAKERS AND SOLE PROPRIETORS OF

LAMBERT'S SOLUBLE QUININE TABLETS.

A Soluble Quinine Pessarie of proved absolute reliability.
Upwards of 5,000,000 have been sold without a complaint of failure.

PESSARIES & CUT SHEET RUBBER GOODS A SPECIALITY, AT BOTTOM TRADE PRICES.

We have a List of Special Articles for Chemists that command a ready sale at large profits (especially in the Colonies); a copy will be sent to any part of the world on receipt of trade card.

GOOD COLONIAL AGENTS WANTED WHERE NOT ALREADY REPRESENTED.

ALSO KNOWN AS SOLUBLE QUININE PESSARIES.

ABSOLUTELY RELIABLE.

TRADE PRICES MODERATE.

SALE UPWARDS OF 5,000,000.

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FOR EXCELLENCE OF QUALITY AND ORIGINALITY.

A Sure Increase of Profit

Accrues to the pharmacist who stocks our fine pharmaceutical products, which have a ready sale, being largely prescribed by medical men owing to their excellence of quality having gained the Highest Award possible—viz:

The Only Gold Medal Internat. Med. Congress, Rome, 1894.

PERMANENT — PORTABLE — ACCURATE IN DOSAGE.

BIPALATINOIDS (O., S. & Co.)

Double-chambered perfect cachets of jujube, so that two unstable salts can be kept apart till reaching digestive tract.

Dr. Lloyd Jones, of Cambridge (report to Research Committee B.M.A., 1896, p. 47), says: "Bipalatinoids of Bland's Pill gave the best results of any iron preparation."

	Per Gross.
Equiv. to ½ or 1 Bland's Pill ..	2/6
Equiv. to 2 Bland's Pills, with Sodium Arseniate gr. ¼ ..	3/6
Equiv. to 1 Bland's Pills, with Aloes gr. ¼ ..	3/6
Equiv. to 1 Bland's Pill, with Ext. Cascara Sagrada gr. ½ ..	3/6
Hypophosph. Co. = ℥j. of Syrup ..	3/6

CONCENTRATED LIQUORS (O., S. & Co.)

Palatable mixtures of the active principles of drugs; no precipitation on keeping, easy to dispense, dosage invariably exact, tested and assayed before sent out.

"Standardised preparations, perfectly miscible with water, made from the purest drugs obtainable."—BRITISH MED. JOURN., Aug. 11, 1896.

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Liq. Bismuth. Co. ..	6/-
Liq. Cantoph. et Pulsat. Co. ..	11/-
Liq. Cubeb. Hydrastis, et Buchu	10/6
Liq. Euonymin. et Bismuth. Co.	10/6
Liq. Euonymin. et Cascara Co.	10/6
Liq. Euonymin. et Pepsin. Co.	10/6
Liq. Healin. et Cascara Co. ..	10/6

ONLY GOLD MEDAL FOR QUALITY AND ORIGINALITY ★ INTERNATIONAL CONGRESS OF MEDICINE AND HYGIENE AWARDED TO MESSRS OPPENHEIMER, SON & Co. LTD FOR THE HIGH STANDARD OF THEIR PREPARATIONS ★ ROME, 1894 ★

PALATINOIDS OF LIQUIDS (O., S. & Co.)

Tiny cachets, hermetically sealed; no evaporation of volatile drugs, full strength retained indefinitely; suitable for inhalations and exhibition of nauseous drugs.

"*Palatinoids* ensure *accuracy of dosage*, *ease of administration*, and *perfect preservation of contents*."—BRIT. MED. JOURN., Aug. 22, 1896.

	Per Gross.
Amyl. Nitris., min. 2 ..	4/6
Carbolic Acid, min. ½ (non-corrosive) ..	4/6
Chloroform, min. 5 ..	4/6
Chloroform, min. 5 of 10 ..	4/6
Creasote (O., S. & Co.), m. ½, 1, 2, & 3 ..	3/6, 4/-, 4/6, 5/-
Creasote, m. 1, Eucalyptol, m. 1 ..	4/6

ACTIVE ANIMAL TISSUES.

Healthy glands, &c., selected while fresh, dried aseptically, and hermetically sealed in perfect jujube cachets; air excluded, decomposition impossible.

"*Dose accurate, medication free from every objection.*"—BRITISH MEDICAL JOURN., 1895.

	Per Gross.
Cerebrinin = 5 grs. fresh ..	9/-
Orchitic Tissue = 5 grs. fresh ..	9/-
Mammary Gland = 5 grs. " ..	9/-
Medulla, Red Bone = 5 grs. fresh ..	9/-
Ovarian Tissue = 5 grs. " ..	9/-
Parotid Gland = 5 grs. " ..	9/-
Pituitary Body = 2 grs. " ..	9/-
Pancreas = 5 grs. " ..	4/6

We cordially invite your correspondence, and will be happy to explain our *Business policy* for *mutual advantage*.

Oppenheimer, Son & Co., Limited, Manufacturing Chemists, 14 Worship Street, London, E.C.

BAYER'S SPECIALITIES.

TRIONAL, SALOPHEN, SOMATOSE, LYCETOL.

PHENACETINE BAYER, SULPHONAL BAYER, PIPERAZINE BAYER.

ARISTOL, EUROPHEN, LOSOPHAN, SYCOSE (the purest Artificial Sugar, free from Para Acid), **IODOTHYRIN** (the only preparation of the Thyroid Gland that contains a definite, ascertained proportion of its active principle).

Wholesale Depot:—ELBERFELD FARBENFABRIKEN CO., LIM., 19 St. Dunstan's Hill, E.C.

ALSO AT MANCHESTER, GLASGOW, AND BRADFORD.

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Who supply Chemists with any of the following preparations packed in their own name:—

Arsenical Powder Dip; Arsenical Paste Dip; Non-Pois. Paste Dip and Fluid Dip; Horse and Cattle Washes; Paste and Fluid; Maggott Lotion; Mange Liniment; Dog Soap; Carbolic Powder; Carbolic Acid; Carbolic Soft Soap.

DISINFECTANTS, BOTH POWDERS AND FLUIDS, IN BULK. PRICES ON APPLICATION. ESTABLISHED 1860.

MASON'S PERFUMED CARBOLIC ACID.

The most reliable and agreeable Disinfectant for the Sick Room and Antiseptic for Toilet purposes.
In 1/- and 2/6 bottles, packed in *free* cases, containing 3 doz. and 1 doz. respectively.

MASON'S CARBOLIC MOUTH WASH ('ODORINE').

An effective and refreshing Dentifrice and Mouth Wash.
In 1/- and 2/6 sprinkler bottles.

Order through your Wholesale House, or direct from SOLE MANUFACTURERS—

C. E. MASON & CO., 107 Whitecross Street, LONDON, E.C.

Write for Price List of PERKS' PERFUMES.

GERMOL

NEW AND POWERFUL DISINFECTING FLUID.

(NON-POISONOUS.)

More powerful than Carbolic Acid, and does not stain or burn in use.

"MICROBMORT" FOR SURGICAL USE.
GERMOL SANITARY POWDER.
GERMOL SHEEP DIP. GERMOL SOAPS.

Samples and Particulars on application to the Sole Manufacturers—

READ HOLLIDAY & SONS, LIMITED,
HUDDERSFIELD, ENGLAND, & NEW YORK, U.S.A.

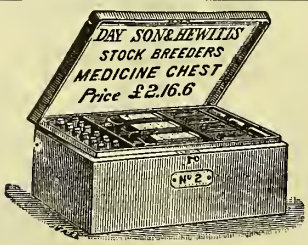
DAY, SON & HEWITT,

Largest Makers in the World of

HORSE AND CATTLE MEDICINES.

For Kicks, Cuts, Bruises, Sore Withers, Swellings Strains of Ligaments and Tendons, Saddle Galls, &c. It rapidly relieves Straining and Paining after Calving and Lambing, and is the remedy for Swollen Udders and Sore Teats.

Price 2/6, 3/6, and 7/- per Bottle.



Complete in 3 sizes. Sent Carriage Paid.

Prices—
£6 6s., £2 16s. 6d., and £1 8s. 9d.

A sure remedy for the Fret, Colic or Gripes, Influenza, Loss of Appetite in Horses. For Debility, Scour, or Diarrhœa in Horses, Cattle, and Sheep. Hoven or Blown Cattle and Sheep instantaneously relieved.

Price 1/9 per Bottle. 20/- per doz.

For all Feverish Disorders among Cattle, Sheep, and Pigs, and for Colds, Indigestion, Costiveness, Yellows, Surfeits, Loss of Cud, Hide-bound, Red Water, &c. Admirably adapted for Cleansing and checking Feverish symptoms in Cows and Ewes after Parturition, rendering the milk copious, pure, and wholesome. It acts as a safe preventive of milk Fever.

Price (Cows), 13/- per doz. box; (Ewes), 3/6 per doz. 3-doz. box, 10/-

Liberal Discounts to Agents and Foreign Buyers.

Trade Terms and full particulars on application.

Attractive Showcards and Handbills sent with each order.

For Blood Disorders in Horses, Eczema, Surfeits Nettle-rash, Ringworm, Itching, Ill-Condition, Off-Appetite, Staring Coat, and Sluggishness. Invaluable for Sterility or Barrenness in Horses and Mares, by virtue of its Phosphoric and other stimulating ingredients. Contains no injurious drug and can be given at all times to all breeds of horses without stopping their work.

Price 5/6 per doz. Packets; 3-doz. 15/-

Sold also at reduced rates in Tins 10/6 and £1 each.

Royal Animal Medicine Manufactory, 22 DORSET STREET, LONDON, W. [Established 1833.]

Kepler

Solution

of Cod-Liver Oil in Malt Extract

Contains the oil in molecular association with Kepler Malt Extract, and so ensures its complete absorption. The benefit to be derived from cod-liver oil depends entirely on the proportion absorbed, and this accounts for the failures recorded where raw oil is administered. In the case of Kepler Solution the taste of the oil is so disguised that it can be taken by the most fastidious patients without nausea or other unpleasant effect. It is the most palatable and easily digested of any form of oil. Children take it readily. Supplied in two sizes at 20s. and 36s. per dozen.

BURROUGHS, WELLCOME & Co.,

Snow Hill Buildings, LONDON, E.C.

REGISTERED **"VASELINE."** TRADE MARK.

WE ARE OFFERING UNDER THE BRAND OF

BLUE SEAL

Our regular No. 1 Size (2-oz. bottle), without card case, in boxes of 3 dozen, at **5/3** PER BOX.

No. 2 Size, in boxes of 1 dozen, at **3/6**

CHESEBROUGH MANUFACTURING CO., 42 Holborn Viaduct, LONDON, E.C.

PROPRIETORS AND SOLE MAKERS OF "VASELINE."

Burgoyne's Australian Wines

For Prices and Particulars apply to—

6 Dowgate Hill,
London, E.C.

PUBLISHED 1894.

Sixteenth Edition. Much Enlarged, and Revised up to date. Price 12s. 6d.

SQUIRE'S COMPANION
TO THE
BRITISH PHARMACOPŒIA.

"No man who has the faintest aspiration to be in the van of pharmaceutical progress can afford to ignore the claims this exact and comprehensive epitome of pharmaceutical information has to a place at his elbow."—*Chemist and Druggist*, March 24, 1894.

"As representing the actual condition of pharmaceutical practice in the United Kingdom, the work has, however, long since far out-grown the latest edition of the Pharmacopœia, to which it was originally intended to serve as a companion, and, as containing a store of valuable information, it may now be regarded as in many respects anticipating the next issue of that authority. Few statements as to which any doubt existed have been adopted without careful examination."—*Pharmaceutical Journal*, June 16, 1894.

"It is considerably ahead of the average text-books, and affords a valuable standard of reference to those who are anxious to keep pace with pharmaceutical advances, the allusions relating in many instances to current literature bearing the date of the present year."—*Lancet*, March 24, 1894.

"The present edition has evidently been revised with the greatest care, of which evidences are to be found on almost every page. Altogether, the improvements are so great that many of those who already possess the work will find it worth while to have the new issue."—*Practitioner*, June, 1894.

"The contents extend far beyond the limits of the Pharmacopœia, as a very large number of unofficial drugs and preparations are considered with the same care and minuteness as the others."—*British Medical Journal*, June 16, 1894.

London: J. & A. CHURCHILL, 7 Great Marlborough Street, W.

THE CHEMIST AND DRUGGIST

ESTABLISHED 1859.

Subscription: Fourpence a Week, Ten Shillings a Year; Summer and Winter Numbers, 1s. per Copy.

CHIEF OFFICES: 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICES: 231 ELIZABETH STREET, MELBOURNE, AND 114A PITT STREET, SYDNEY.

As an Official Journal

THE CHEMIST AND DRUGGIST is supplied regularly to every member of the following Societies:—

Pharmaceutical Society of Ireland.
South African Pharmaceutical Association.
Pharmaceutical Society of Natal.
Central Pharmaceutical Association of N.Z.
Otago Pharmaceutical Association.
Pharmaceutical Society of Queensland.
Pharmaceutical Society of South Australia.
Pharmaceutical Society of Tasmania.
Pharmaceutical Society of Western Australia.
Pharmaceutical Chemists' and Apothecaries' Assistants' Association of Ireland.

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POSTCARD COMPETITIONS.

DIARY COUPONS.

The home section closed on December 31, 1896, but the competition for colonial and foreign subscribers remains open until January 20, which is the last day that they may post their cards. Those who observe this note in time should, therefore, fill in their cards and return them to us.

MONEY-MAKING AND MONEY-SAVING.

Can anybody offer an idea for making or saving money in the chemists' trade? Something practical and perfectly novel. Concise replies on postcards should be sent to us before January 23. One guinea for the best suggestion, to be awarded as the Editor may decide.

INSETS.

WE can insert circulars and price-lists in the Winter Number of THE CHEMIST AND DRUGGIST, to be published on the last Saturday of this month.

There is no better way of distributing circulars; none cheaper. Every one goes home to a man of business—a buyer.

Will those who think of giving us an inset of this kind communicate with our Publisher? We may add, *at once*, for the month is getting on.

Summary.

SEVERAL useful formulas and hints are printed on p. 51.

A pennyworth of London milk contains 80,000,000 microbes (p. 52).

2,000,000*l.* is lying at the bank for Bovril shareholders (p. 49).

WHY do drug-stores not like dispensing? We answer that question on p. 54.

WE give on p. 60 a report on the P.A.T.A. meeting held in Liverpool on Thursday.

2,500,000*l.* has been left by Mr. Alfred Nobel to benefit science and scientists (p. 51).

A NEW table-water ("Cymralis") and synthetic perfumes are the novelties described on p. 50.

RUSSIA is a dark horse in regard to chemical industry, but we throw some light upon it on p. 57.

MR. ROBERT SHOEMAKER, a well-known Philadelphia wholesale druggist, died last month (p. 50).

WE discuss the advantages and disadvantages of cough-mixtures, giving several typical formulas (p. 55).

A LONDON drug-grinding warehouse was in a blaze last Saturday, 5,000*l.* damage being done (p. 42).

THE otto-of-rose correspondence is continued by Mr. J. C Umney, who shows that Mr. Conroy's figures require adjusting (p. 67).

FAILURES in the English drug-trade last year were the same in number as in 1895, but they included more bankruptcies (p. 58).

MR. SHEPPERLEY (defendant in the famous counter-prescribing case) writes a lively letter as a sequel to Dr. Rentoul's (p. 67).

THE PASTEUR INSTITUTE is to benefit under Baron Hirsch's will, but our Paris correspondent says 2,000,000f. is not the figure (p. 45).

LONDON CO-OPERATIVE STORES are making a feature of medicinal substitutes, as will be seen from the paragraph on store-prices (p. 43).

THERE were more deaths from chloroform in the United Kingdom in 1896 than 1895, and the figures for England are particularly bad (p. 58).

THE work of the Paris Society of Pharmacy during 1896 is reviewed on p. 46, results of a number of interesting investigations being included.

SOME interesting facts regarding the oxidation of mercurous salts are mentioned on p. 52. Calomel does not change so easily as is generally supposed.

THE Irish aërated-beverage trade keeps good, and foreign bottles had been almost ousted when an advance of 10 per cent. was recently made on English ones (p. 44).

THE *Lancet* has taken the opinion of a number of doctors regarding the use of preservatives in food. The result is that the majority say, but cannot prove, that preservatives do harm (p. 52).

MESSRS. W. J. BUSH & CO., in the notes on essential-oils printed on p. 51, mention some interesting facts regarding the distillation of otto of rose in Grasse. To this we add some observations by French chemists on French otto.

A BLACKBURN MAN has been heavily fined for cleaning methylated spirit and selling it as whisky, and some Sheffield herb and ginger beer makers have been taught that they must not compete with the brewers of alcoholic drinks unless they take out licences (p. 59).

THE Wimbledon arsenical-soap decision, where the Magistrates held that the soap was not a drug because it did not contain any arsenic, is to be appealed against (p. 59). Another case, in which a Surbiton chemist was fined, was heard at Kingston on Thursday.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Lending Cheques.

Some three weeks ago a rather fashionable-looking young fellow, between twenty-five and thirty years of age, lodged at the Plough Inn, Carmarthen, for about seven days, and the day before his departure he persuaded Mr. Arthur Arthur, chemist, Nott Square, to favour him with a blank cheque, as he wanted to draw some money from the London and Provincial Bank, where, it was assumed, he had a running account. The young man filled the cheque in for 5*l.*, gave it to his inn landlady in payment for his board and lodgings, and received the change. When the cheque was presented the next day, the cashier discovered that it was a forgery, seeing that it was signed "Arthur Arthur, chemist," a form of signature which Mr. Arthur never used. The "gentleman" had left the town, but was arrested by the Dublin police on New Year's Eve.

Where is William Stanley?

William Stanley prescribed until lately at the "Medical Hall," Tottenham Road, Kensal Road. Mrs. Tate, wife of a porter, had been to this Medical Hall, which, the husband said, looked like a chemist's. She paid 9*d.* for some medicine, and the young man told her she was pregnant. After taking the medicine she was not so well, and Dr. Roberts ordered her to the hospital. There she died. William Stanley was subpœnaed, but did not appear, for which contempt of court Mr. Coroner Oswald ordered a fine of 40*s.*, and had serious doubts about sending him to Holloway. The Coroner said he understood the young man was "covered" by a qualified medical man. That was a matter for the General Medical Council.

Allegations Against a Doctor.

A young man named Copping, a coachman, died at Birkenhead on Saturday last. He had pains in his head and back, and went to Mr. Joseph Cookson, chemist, and got an antipyrin-powder and some camphor-liniment. Afterwards Dr. Arthur S. Clarke was sent for, and he made up a draught of bromide of potassium and chloral. Later, Dr. G. S. Stansfield and Dr. Clarke were sent for again. Dr. Stansfield and two other witnesses thought Dr. Clarke was the worse for drink. Dr. Clarke said to Dr. Stansfield, "He is not dying; he will be all right. I warn you not to touch my patient. He is my patient." He died a few hours afterwards. Dr. Jones made a *post-mortem* examination, and thought the death was due to an irritant poison. This evidence was given at the inquest, on December 31, and the jury returned a verdict that deceased died from an irritant poison, but how it was taken or administered there was no evidence to show. The jury were satisfied that the draught given by Dr. Clarke was not poisonous.

The Sale of Laudanum.

Policeman Seals, of Sheffield, was called to a miserable-looking married woman last week, who had taken 1½ oz. of laudanum. He had been trained in "first aid," and administered an emetic which took effect. The woman was sent to the hospital, and later on came before the Sheffield City Bench. Asked where she got the laudanum, Mrs. Stringer told the Magistrates she bought 4½*d.* worth at "Dyson's," and gave as an explanation the statement that it was wanted by some one who was too ill to fetch it herself. The Chairman commented on the dangerous case with which Mrs. Stringer had been able to secure so much laudanum, and said it was a great pity that poisons were allowed to be sold in large quantities, without proper inquiries being made of and about the purchaser. The woman seemed penitent, and was sent away with her husband, who was told to look after her better.

Chemists' Assistants' Association.

The following are the arrangements for the second half-session, which begins with the meeting to be held at 103 Great Russell Street, W.C., next week:—

Jan. 14. Musical and social evening.
„ 21. Paper, "The Birth of an Illustrated Journal," by E. W. Richardson.
„ 28. Paper, "Popular Pharmacy," by J. C. Hyslop.
Feb. 4. Cinderella dance, Dorset Hall, Portman Rooms, at 7.30.
„ 11. Short papers by members.
„ 18. Paper, "The Therapeutics of Emergencies," by H. Macnaughton Jones, M.D.
„ 25. Paper, "Some of the Alkaloidal Assays of the B.P.," by E. H. Farr, F.C.S., and R. Wright, F.C.S.
Mar. 4. Annual dinner, King's Hall, Holborn Restaurant.
„ 11. Paper, "Scientific Education," by Thos. Tyrer, F.I.C.
„ 18. Paper, "Pharmacy: Some of its Dangers and Duties," by N. H. Martin, F.L.S.
„ 25. Cinderella dance, Dorset Hall, Portman Rooms, at 7.30.
April 1. Short papers by members.
„ 8. Paper, "Antitoxins," by F. W. Gamble.
„ 29. Musical and social evening.
May 6. Annual general meeting.

Store-prices.

The Civil Service Supply Association have added to their stock a series of "C.S.S.A." preparations. The following list is quoted:—

C.S.S.A. antibilious pills, containing 24 pills in box, coated or uncoated, per box 4*d.*
C.S.S.A. aperient pills, containing 24 pills in box, coated or uncoated, per box 5*d.*
C.S.S.A. cough-balsam, per bottle 5*d.* and 1*s.*
C.S.S.A. hair-wash, per bottle 10*d.* and 1*s.* 6*d.*
C.S.S.A. household embrocation, 8*d.* and 1*s.* 9*d.*
C.S.S.A. lavender-water, per bottle 7½*d.* and 1*s.* 10*d.*
C.S.S.A. prepared ammonia, for baths and domestic purposes, per bottle 7½*d.*

Among alterations of price, Beecham's pills are raised from 9*d.* to 10½*d.*; manna from 4*s.* to 5*s.* 6*d.* per lb., and from 4*d.* to 5*d.* per oz.; Mülhen's Rhine violets from 2*s.* 3*d.* to 2*s.* 5*d.*; and saffron from 2*s.* 4*d.* to 3*s.* 8*d.* per oz. Menthol cones are reduced from 4*d.* to 3½*d.*; orris-root from 1*s.* 4*d.* to 1*s.* 2*d.*, and from 1*s.* 7*d.* to 1*s.* 6*d.* for the powder; and precipitated sulphur from 6*d.* to 5½*d.* per lb. Apenta water is quoted at 11½*d.* per large bottle. Beetham's preparations, Dicey's Daffy's elixir, Géraudel's pastilles, Möller's cod-liver oil, Powell's balsam of aniseed, Powell's aperient pills, and Widow Welch's (Kearsley's original) pills are taken out of the list for obvious reasons.

The Army and Navy C.S.L. mark Beetham's preparations, Powell's aperient pills, Smedley's chillie-paste, and Benbow's dog-mixture discontinued. They quote Beecham's 10½*d.*, Carter's 11½*d.*, Möller's cod-liver oil 1*s.* 8*d.* and 3*s.* 5*d.*, Kay's essence 2*s.* 1*d.*, Powell's balsam of aniseed 1*s.* and 2*s.*, Dr. Scott's liver-pills 11*d.* and 2*s.* 3*d.*, Frame-food jelly (marked "discontinued" in one column and "added" in another) 6½*d.*, and Mrs. Johnson's soothing-syrup 2*s.* 4*d.* They announce "glycerine-and-cucumber, a new and improved preparation made in the society's laboratory," 1*s.* and 1*s.* 9*d.*, and their list comprises several other new preparations obviously intended as profitable substitutes.

Gold.

The first meeting of the London Section of the Society of Chemical Industry for 1897 began under favourable auspices at the Hotel Previtali on Monday evening, when a company of about sixty sat down to dinner. The subsequent meeting held at Burlington House was very well attended, and two papers were read. The first of them was by Mr. Arthur Caldecott, B.A., on "The Smelting and Refining of Cyanide Bullion." In the Macarthur-Forest cyanide process the cyanide solution containing gold is passed through zinc, with the result that the precipitated or slime gold is contaminated more or less with zinc and other metals, alone or as cyanides. If they are not removed the quality of the gold is reduced. Mr. Caldecott finds that by

firing a mixture of the slime, sand, and nitre on an open tray most of the objectionable impurities are oxidised or volatilised, and by subsequent fusion with borax and sodium carbonate a comparatively pure gold is obtained. The paper contained much chemical and mechanical detail and diagrams of the apparatus used. In the discussion following the reading of this paper Professor Roberts Austen indicated how difficult it is to assay bullion in bars of fairly high fineness when such bullion is contaminated with small quantities of zinc and silver. Mr. Claude, the assayer of the Bank of England, also contributed to the discussion and, in describing his experience as to the difficulties alluded to by previous assayers, suggested that very much depended upon the way in which the "dip" was begun for determining the value of the bullion. The second paper was on "Pyrometers," by Professor Roberts Austen, but there was little in it, of interest to the drug-trade, which we have not already reported in the paper by Dr. John Conroy (*C. & D.*, December 26).

Festive.

On New Year's Eve Mr. Lewis Vigis, chemist, of Bath, entertained his workpeople engaged in the packing of fuller's earth, &c., and the various articles with which he deals wholesale. Bath being the home, so to speak, of fuller's earth, Mr. Vigis some time ago conceived the idea of preparing it on the spot for the wholesale trade, and the business has grown enormously, the number of employés being seven or eight times what he started with.

The home travelling representatives and the chiefs of departments in Messrs. Burroughs, Wellcome & Co.'s Snow Hill establishment gave a complimentary dinner to the popular manager, Mr. R. C. Sudlow, on the evening of December 30. The dinner was given in the Masonic Hall at the Frascati, and a very pleasant evening was spent. Mr. J. H. Harris, the senior travelling representative, presided and proposed the toast of the evening, which was most heartily received. During the evening a number of songs and recitations were given, and "Auld Lang Syne" was sung at a late hour.—Last Saturday evening the firm gave a dinner to about thirty of their travelling representatives and the prominent members of the office and works staffs, in the Prince's Salon of the Holborn Restaurant. Mr. Sudlow took the chair, in the absence of Mr. Wellcome. The gathering was entirely social, and an excellent musical programme was arranged and duly carried out.

Messrs. Newball & Mason gave their thirteenth annual "extract dinner," at the Hyson Green Works, on Wednesday, December 30. The large drug and herb room had been converted into a fine banqueting-hall, all traces of drugs having been removed. The room was decorated with flags and armour, and the table, 100 feet in length, was gay with flowers and foliage. Mr. T. Mason was in the chair, and Mr. B. Deaville occupied the vice-chair. A substantial dinner of roast beef, pork pies, plum pudding, &c., was served. Then followed a programme of speeches, songs, and performances of prodigious length. Besides toasts, we count no fewer than forty-eight items on the programme, and these include a comedy and a farce performed by the Mason-Deaville Dramatic Club, and an entertainment by the Mason's Minstrels consisting of thirteen more items and another farce. We are not surprised to hear that the merriment lasted until 5 the next morning, and that the proceedings were resumed and completed on the evening of the 31st. During the evening forty gallons of botanic beer, made from extract of herbs, were consumed.

Carbolic Fatalities.

Claude Cameron (65) committed suicide on Saturday last at Liverpool with carbolic acid. No reason was known for his conduct.

At an inquest held at Ramsgate on December 30 on the body of a woman who committed suicide by drinking carbolic acid, Mr. Coroner Hardman said there seemed to be absolutely no restriction on the sale of it; it could be obtained at an oilman's in any quantity. No doubt the jury had seen articles and letters in the Press with accounts of deputations to the Home Secretary on the subject of the advisability of including carbolic acid in the scheduled poisons under the Poisons Act. It was sold freely by oilmen as well as chemists, and it afforded an easy means of committing suicide. Many persons and juries thought that some restrictions should be imposed on its sale, but for himself he did not think it would be a useful thing to do. Carbolic acid was an article of commerce and was used legitimately very largely. If poisoning were the only means of committing suicide, he should be more inclined to support a movement for restricting the sale. But it seemed to him that when persons made up their minds to commit suicide by poison they would not be deterred because of the want of a convenient poison, but would resort to other means.

Drug-contracts.

Contracts for drugs, &c., for workhouses have been made with the following:—

By the Medway Guardians with Messrs. Oslar & Co., of Rochester.

By the Coventry Guardians with Mr. A. Axford.

By the Foleshill Guardians with Mr. Oakes, chemist and druggist, Bedworth.

Chemists at Football.

On Saturday last the Barronetta Football Club (Barron, Harveys & Co.) played their return match with Sir Joseph Causton's F.C. The game, which was greatly hampered by the fog, ended in a draw of 1 goal each, the Baronetta thus winning the rubber by 3 points out of 4.

A Manufacturing Chemist Drowned.

On Monday evening last Mr. Joseph Horrocks, 36 years of age, a chemical-manufacturer, carrying on business at Chadderton, near Oldham, was walking with a party at Middleton, and they had to cross the Rochdale Canal by a lock-bridge. He and a Mr. Shaw, 26 years of age, were arm-in-arm, and a little behind the rest of the party. The others, having crossed the bridge, waited for the two gentlemen who were bringing up the rear, when it was discovered that, owing to the dark night, they had both fallen into the lock, and were drowned without a sound being heard, any noise they might have made being overpowered by the by-wash and the sound of water falling over the lock-gates. Both bodies were recovered the same night, enfolded in each other's arms.

Suggested Patent-museum.

The suggestion has been made that a patent-museum should be established at the Patent Office in London, where models of inventions, new materials and compounds, and products of mechanical and chemical operations can be seen and referred to as freely as their nature will admit. Mr. J. Sinclair Fairfax, President of the Society of Patent Agents, who writes on this subject to the *Times*, suggests that these models should be typical illustrations of the more important developments of recent progress, together with such corresponding examples of their progenitors as may be obtained. The collection should form an index museum to the very useful classified abridgements of specifications compiled under the direction of the Comptroller-General. If judiciously selected, Mr. Fairfax suggests, the examples would indicate the evolution of prevailing ideas along the main thoroughfares of thought, thus guiding the inventor upon paths found to be practical, and warning him against re-patenting old devices. As our patent system does not provide an examination for novelty, it appears the more incumbent upon the Government to provide means whereby those interested may inform themselves of what has already been done; and, although the proposed museum could only do this to a limited extent, it should be supplemental to the library, and lead the searcher to the abstracts and specifications for the fuller knowledge. It is understood that the Government are about to ask for power to further extend the Patent Office Buildings, but a museum such as the one suggested, and such as is actually in existence at Washington, U.S.A., and in other capitals, would require a great deal of space. There is a good deal of room available at the Imperial Institute, but probably that building is too far away from the business portion of London to make a patent-museum located within it useful.

Fires.

A serious fire occurred on January 1 at the extensive drug-grinding mills of Messrs. Crosbie & Co., in New North Road,

Hoxton. Soon after 11 A.M., without the smallest warning, flames burst through the middle windows of the second floor. The inflammable nature of the stock being well known to the residents adjoining, a perfect panic took place. Many people left their houses and shops and rushed away for safety. The fire originated in the second storey, and the employés at once applied their own hose, but they could only prevent the fire spreading downwards. It took the brigade, strong as it was in numbers and appliances, over an hour to get the fire under control. The entire length of the building —about twenty yards—has been gutted at the top. The roof fell in before the brigade had long been at work, and the salvage is entirely confined to the lower portion of the premises. Messrs. Crosbie & Co. inform us that practically the whole of their heavy plant has been saved, and as soon as it is clean this can be got to work, which they trust will be this week. They believe that their customers' goods are amply insured, but they say the stock was exceptionally heavy just at the time. The total damage they estimate at 5,000*l*. They cannot tell how the fire originated. In the course of the operations the firemen turned the hose, at close quarters, on a stock of about a ton of cayenne. The smoke and vapours were splashed over the firemen, and several were temporarily disabled.

A fire occurred on Saturday evening last on the premises of Messrs. F. Green & Co., wholesale chemists, 393 Farm Street, Birmingham. The building is a three-storey one, and the fire-brigade took an hour or two to subdue the flames. Considerable damage was done to the building and its contents. The premises are insured, but the origin of the outbreak is at present unknown.

IRISH NEWS

Business Changes.

Messrs. Parker & Son, of the Medical Hall, Dominick Street, Galway, have made extensive alterations in their establishment, and have appointed Mr. Meyrick, L.P.S.I., from Messrs. Hamilton Long & Co., Dublin, as manager.

Messrs. L. T. Peacocke and P. A. V. Peacocke, trading as P. A. Leslie & Co., wholesale druggists, 36 Bride Street, Dublin, have dissolved partnership, and the business will in future be carried on by Mr. P. A. V. Peacocke under the same style as heretofore.

A new pharmacy is about to be opened in Cornmarket, Dublin, by Mr. Andrew Farrington, pharmaceutical chemist. On the other hand, an apothecary's shop has just been closed in the other end of the city, Surgeon McGrath, L.A.H.I., who carried on a compounding establishment next door to the Irish Pharmacy House, Lower Mount Street, having relinquished that business.

The Late Sir George B. Owens.

The funeral of the late Sir George B. Owens, M.D., ex-Pharmaceutical Councillor, took place on Saturday last in Mount Jerome Cemetery, Dublin. It was attended by a large number of leading citizens. Sir Robert Jackson, C.B., Governor of the Apothecaries' Hall, and Mr. W. F. Wells, President of the Pharmaceutical Society of Ireland, represented their respective Corporations, and the following pharmacists, apothecaries, and chemists were present:—Dr Ninian Falkiner, Mr. J. E. Brunker, Sir Henry Cochrane, Sir Charles Cameron, Messrs. J. King Irwin, C. R. C. Tichborne, H. A. Byrne, Arthur T. Ferrall (Registrar, Pharmaceutical Society), John Evans, G. A. Stritch, R. J. Downes, R. A. C. Burne, and A. Montgomery. The burial service of the Church of Ireland was conducted by the Very Rev. Hercules H. Dickenson, D.D., Dean of the Chapel Royal.

A Heavy Drug-bill.

At the Cork Quarter Sessions last week a committal order was sought by Messrs. Lyons & Co. against Dr. H. McLoughlin, South Mall, against whom a decree was recently given for 20*l*., to be paid in monthly instalments of 2*l*., but who refused to pay. The defendant pleaded poverty and a heavy drug-bill for which he had not been paid by the societies whose members he attended. His Honour allowed the case to stand, to see if a settlement could be made between the parties.

The Mineral-water Trade in Belfast.

Commenting on the aërated-water industry in Ulster, the *Belfast News Letter* says that, on account of the early part of 1896 being so mild, the amount of business done showed a considerable increase over that for the corresponding period of last year; but demand during the summer months was not anything like what was generally looked forward to at the beginning of the season, so that the advantage gained was not fully sustained. The foreign demand was exceptionally good, and the quantity of mineral waters exported during the twelve months was rather in excess of that for 1895. Although the importation of foreign-made bottles into the United Kingdom during the eleven months of 1896 was valued at 359,939*l*., an increase of 28,049*l*., the great bulk of the bottles required by the Belfast manufacturers was obtained from English firms, whose prices were much lower than those quoted by foreign makers. Up to the end of last month it looked as if home-manufactured bottles would be utilised almost exclusively during the present year, but as an advance of prices amounting to 10 per cent. has now been decided on, this may have the effect of reversing the position.

The Model Union.

The Wexford Board of Guardians have a good conceit of themselves in reference to their medicine-contract. At their meeting last week the Clerk explained the system of marking adopted by the Board, which is to give additional marks for the medicines most frequently used. There was, he said, nothing like it in Ireland, and they could challenge Ireland as to their expenditure in medicine. He knew one workhouse, no larger than one of theirs, where more money was paid for medicines than for the whole of the Wexford Union.

Throwing Physic to the Dogs.

At a meeting, last week, of the Guardians of Carrick-on-Suir, the Vice-Chairman said it had been reported that a lot of medicine was thrown out of the hospital window for the dogs to lap up. He wished to know if such were the fact. The Master said he would inquire into the allegation.

Took the Wrong Sleeping-draught.

Last week, at Dublin, Mr. James Scott Mackenzie, a well-known amateur photographer, died from the effects of a dose of prussic acid, which he took in mistake for a sleeping-draught.

Pharmaceutical Society of Ireland.

The usual monthly meeting of the Council was summoned for last Wednesday, January 6, at the Society's house, 67 Lower Mount Street, Dublin, at 3 o'clock; but in consequence of the non-attendance of a quorum the members who attended were obliged to separate at 4 o'clock without being able to transact business. The following gentlemen attended:—The President (Mr. W. F. Wells), and Messrs. Grindley, Bernard, Conyngham, Beggs (Treasurer), and Kelly.

French News.

(*From our Paris Correspondent.*)

PROPOSED MEMORIAL TO CAVENTOU AND PELLETIER.—M. Demaizières, pharmacist, of the Avenue de Villiers, has broached a scheme for erecting a monument to Caventou and Pelletier. "The first thing is to form a committee and obtain promise of subscriptions," he explained, "and then we shall see what we can manage—a bust, a statue, or a simple memorial. As to the site, that would depend on the importance of the monument; it might be placed in a public square, garden, or other appropriate site, perhaps in or near the School of Pharmacy."

PHARMACEUTICAL ORGANISATION IN CORSICA.—A pharmacists' syndicate has been established in Corsica. One of the first acts of this body was to prosecute an ironmonger and a grocer of Bastia for selling cod-liver oil. Defendants were each fined 20*l.*, but they have given notice of appeal. At Propiano, where the doctor and grocer were also in the habit of selling medicaments contrary to French law, the pharmacist of the town joined the syndicate, who at once sent a warning letter to the offenders, calling on them to discontinue the practice.

POISONING BY MILK.—Some time ago Dr. H. Duchesne addressed to the Paris Academy of Medicine a note on a case in which an adult and an infant were poisoned by milk that had remained twelve hours in a tin can. He said that the accident was due to the action of the lead in the tin and the solder. Professor Gautier now reports that he disagrees from Dr. Duchesne's theory. He is of opinion that, even if milk is allowed to remain in a tin of which the solder contains lead, toxic symptoms cannot be set up unless the milk has fermented in the receptacle. He attributes the poisoning case in question to the microbic fermentation of the milk in a dirty can.

THE PURE-MILK QUESTION. — The "Pure-milk" Committee comprises Dr. Brouardel, of the Academy of Medicine; Dr. Roux and M. Duclaux, of the Institute Pasteur; Dr. Budin, who has all along advocated the use of sterilised milk; MM. Ch. Girard, Variol, Napia, and Levraud. At the inaugural meeting, held under the chairmanship of M. Pierre Baudin, President of the Municipal Council of Paris, M. Paul Strauss dwelt on the object of the committee, viz. the "patriotic and humane duty" of ensuring the supply of cheap and pure milk for the capital, and of thereby saving thousands of lives among its none too numerous children. It was decided to form three sub-committees, which are respectively to study the production of milk and the hygiene of dairies; the sterilisation and preservation; and the sale and distribution of milk.

M. BERTHELOT ON POLITICS.—Berthelot's letter to the *Matin*, published this week, denying the *Times* correspondent's statements regarding certain Egyptian political matters and vindicating his career as Minister of Foreign Affairs, will not surprise anyone who has had the advantage of personal conversation with the distinguished savant. In fact, if one thing struck a *C. & D.* man more than another in the course of a recent interview, it was the tone of sincere satisfaction with which M. Berthelot spoke of his political achievements. He is probably prouder of the Indo-Chinese frontier settlement than of his chemical work, and quietly remarked that, so far as the Turkish question went, "we" (*i.e.*, the Foreign Ministers of the great Powers) "worked for weeks and months to avoid the terrible calamity of a European war."

A NEW YEAR'S GIFT TO THE PASTEUR INSTITUTE.—Baron Hirsch's widow has decided to make a magnificent donation to the Pasteur Institute, in memory of her late husband. The Paris press stated the amount of this "New Year's gift" as two millions of francs, an unprecedented *étrenne*. But this, it would appear, was a little premature; the precise amount and its exact application have not yet been decided. M. Bischoffsheim, Mdme. Hirsch's cousin, who called on Mdme. Pasteur to obtain certain details regarding the Institute, thinks that the sum might be devoted to chemical and biological laboratories, and also, perhaps, to "remunerate *savants* like Dr. Roux and M. Graucher, who have little or no salary, as well as M. Metchnikof, who conducts daily and gratuitously a class of seventy or eighty non-paying students."

THE FAMOUS ANTISEPTIC COTTON-WOOL CASE was once more reported on at the recent Council meeting of the French Association of Pharmacists. The French Courts have not yet decided whether persons other than pharmacists have the right to sell antiseptic gauze, cotton-wool, &c. A test case was taken up in the Bouches-du-Rhone department by the Association some four years ago. A conviction was obtained, but was followed by an appeal to the Court at Aix. This tribunal asked professional opinion. Three experts were appointed, and the pharmacists thought their case gained, but it was discovered that one expert was not a pharmacist, but a professor of pharmacology at a school of medicine. So the *expertise* was quashed, and three Lyons scientists were called upon to decide. Their verdict was again favourable to the pharmacists, and it is hoped that the end of the "law's delays" is now in sight.

MEDICAL MEN ON STRIKE.—Strikes among medical men in the service of the Municipality are not unknown in Paris. The latest "bitter cry" comes from the eleventh arrondissement, the four doctors who share the night-work of this, the East-end of Paris, having written to the Prefect of Police, complaining that the new system of a fixed annual fee of 24*l.* only brings them about 2*s.* 6*d.* a visit, instead of the 8*s.* formerly paid for each nocturnal "call." Prefect Lépine, "the thorn without the rose," as his adversaries playfully pun on his name, seems inclined to adhere to the new system, and hints that there are plenty of other medical men who will take the work at the price. The eleventh arrondissement has 70,000 inhabitants. The four medicos have about a thousand night-calls a year, which are paid for at the same rate as those in the aristocratic quarters, where there are, perhaps, a dozen visits in the year.

THE RETORT SARCASTIC TO INTERVIEWERS. — After accepting from the German Emperor the order of the "Royal Crown," the very one which Pasteur flatly refused two years ago, Dr. Roux could hardly hope to avoid being interviewed on the subject. The *savant*, however, turned the tables very neatly on his pursuer, pointing out that as Koch, Loeffler, and Behring had received and accepted French honours, he could hardly be expected to refuse what was merely a return compliment to French science, and force upon the ruling powers of France the ungracious task of explaining away the international ill-feeling which such churlishness would foster. As to Pasteur's refusal, that was quite another thing: "Pasteur was Pasteur," and stood on a level, so to speak, with the German Emperor. He, Dr. Roux, was only a modest worker living in the shade, "and only seeking to escape publicity," he concluded, putting on his hat and coat, as a Parthian shaft at his interlocutor.

A JUDICIAL ERROR.—It is hoped that the case of alleged poisoning, reported in the *C. & D.* of October 31 under the above heading, may lead to the establishment of a regular school of legal analysis in France. Dr. Brouardel thinks that the Morgue might be converted into a training-school for this purpose. Under the present laws a medical man is not allowed to perform a *post-mortem* until he has practised for five years, by which time the little legal medicine which he "crammed" to pass his examinations has evaporated. Any doctor refusing a *post-mortem* is liable to a 4*l.* fine, while the liberal fee for one is 12*s.*, whatever the distance. A doctor recently declared in the Chamber of Deputies that he had just been called upon to perform two *post-mortems*, though he had not touched the scalpel for thirty years. The head of the Academy of Medicine considers that medical students should, after passing their final examination, devote one year to practical *post-mortem* and analytical work, and another year to hygiene and mental maladies. A certificate, which would then be granted them, would give them the exclusive privilege of giving legal expert evidence; while posts would be found for them by the Government or Municipal authorities, to enable them to live without a private practice.

PARIS SOCIETY OF PHARMACY.

RECORD OF THE YEAR'S WORK.

(From our Paris Correspondent.)

THE New Year's meeting of the Paris Society of Pharmacy is usually the most interesting of their monthly gatherings, the programme including the Secretary's report for the year, the presentation of medals, and the election of Vice-President and Secretary. On Wednesday, January 6, Professor Villiers-Moriamé formally vacated the chair in favour of M. Sonnerat while M. Bourquelot took the latter's seat as Vice-President, and M. Guinochet (of the Charité Hospital) succeeded Dr. Viron as Annual Secretary.

M. Viron's last secretarial function was the reading of his report for 1896, in the course of which he referred especially to Moureu's work on veratrylamine. Veratrol, treated with nitric acid, produced monitro-veratrol, containing a small

proportion of dinitro-veratrol. This crude nitro-veratrol, treated (while cold) with zinc and hydrochloric acid, yielded a chlorostannic compound, which decomposed by H_2S, treated with ammonia, and exhausted with ether, gave crude veratrylamine. M. Moureu had obtained this body in a pure state and prepared a number of its derivatives in a crystalline form.

The same member had succeeded in synthesising isosafrol. Methylene-homocaffeic acid, heated, loses its carbonic acid and yields a liquid physically and technically identical with natural isosafrol.

M. Moureu had likewise studied anethol, and succeeded in characterising two isomers.

MM. Patein and Dufau had continued their work on the combination of antipyrin with phenols; while M. Bougarel had obtained from the bark, twigs, and roots of a Brazilian tree, known by the native name of Yberaromi, a crystallised alkaloid giving fluorescent solutions, a very soluble alkaloid isolated as tannate, and a red resinous colouring-matter (possibly produced by oxidation).

M. Villiers, the new President, had observed the absence of normal boric acid from wine, and the presence of a notable quantity of leucine in the urine of a small-pox patient.

M. Lafay, at the Paris Superior School of Pharmacy, had read a paper on the pharmacology of benzoate of sodium. The Codex preparation should occur in needle-shaped crystals, be slightly efflorescent, and be only slightly soluble in alcohol even at boiling-point. Out of seventeen samples, one only was found neutral, ten were alkaline, and six acid. He considered that while a slightly acid product might be accepted, alkalinity should not be permitted.

MM. Petit and Terrat had studied the caffeine-content of tea. Having found that chloroform only extracts a small proportion of the substance from *dry* tea, they advise that chloroform should be made to react on powdered tea steeped in water. This process gave a larger result than any other.

M. Bourquelot, the new Vice-President, was one of the principal contributors to the Society's transactions last year. In conjunction with M. Bougault he has investigated the reactions of hydrocyanic acid, including those given by this acid with tincture of guaiacum. If this tincture be replaced (after adding sulphate of copper) in Schœnbein's reaction, by aqueous solution of guaiacol, the paper impregnated with this liquid takes a carmine tinge, and if replaced by a solution of α-naphthol, the colour is violet-blue.

M. Bourquelot, writing on raffinose, observed that the soluble ferments secreted by *Aspergillus niger* possessed the property of saponifying this substance. The same author had explained the methods of isolating from *Monotropa hypopythis* a glucoside analogous to (and perhaps identical, with) gaultherin; of ascertaining the presence of a ferment capable of saponifying this glucoside in the stem of *Monotropa hypopythis*, the root of *Polygala*, *Senega*, *Spiræa Ulmaria*, *Filipendula salicifolia*, and in the leaves and fruits of *Gaultheria procumbens*. This ferment or "gaultherase" is a new one, for neither gaultherin nor the new glucoside extracted from the *Monotropa* are saponified by any previously-known ferment; and the ferment which acts on these glucosides does not act on those which are split up by emulsin.

M. Bourquelot had also published papers on the oxidising ferments of mushrooms. After having shown that the aqueous infusion of mushrooms, rich in tyrosinase, would preserve its activity for a long time by the addition of chloroform, he had shown its action on numerous bodies—phenols, phenol-ethers, and aromatic amines. Sometimes these ferments permitted the identification of certain chemical bodies, such as creosol, guaiacol, α- and β-naphthols, morphine, &c.; at other times medicaments containing these ferments might determine incompatibles by their association with certain compounds. Gums, for example, which contain a large proportion of this ferment, communicate a red tinge to guaiacol.

M. Leidié had made some interesting researches on albuminoids in septic urine. He had explained bacteriologically that Gueterbock's "pyine" is an albumenised alkali, and Riessner's "mucin of ammoniacal urine" a nucleo-albumen. What is sometimes called "mucin" was supposed to be derived from the so-called mucus in the bladder. It is a mixture principally composed of a globulin which is precipitated by the acidity of the urine. He also dwelt on the composition and properties of this nucleo-albumen.

M. Prunier had studied Schleppe's salts, and communicated a paper on the testing of official bromides and iodides; M. Lafay had studied the pathologic liquids of the parotid gland; while M. Voiry had read a paper on the composition of a pleuritic liquid. A density less than 1·018, the presence of over 40 grammes per litre of organic matter, and, above all, the presence of peptones, characterise "hydro-thorax."

M. Grimbert's researches concerning Friedländer's pneumobacillus, and various species of colibacillus, were noteworthy. He had proved, contrary to generally accepted ideas, that the colibacillus has no action on saccharose, only one out of seven specimens having set up fermentation. This is important, as showing that when distinguishing between the colibacillus and Eberth's bacillus, saccharose must not be substituted, as certain authors had suggested, for lactose.

In conclusion, M. Viron welcomed the new members, MM. Lafay and Voiry, and complimented MM. Delephine and Roques upon their acquisition of the gold medals—the highest honour the Society could bestow.

Foreign and Colonial News

A COCAINE EPIDEMIC.—An American telegram, dated December 28, states that a strange craze has broken out at Manchester (Kentucky), where hundreds of people have taken to the cocaine habit with disastrous results. The evil commenced by a local druggist making a preparation of cocaine and menthol, which was said to be useful for catarrhs. People suddenly began flying to the drug, and the effect of many of the victims was deplorable, several of them having been sent to the asylum hopelessly insane.

PHENACETIN, SULFONAL AND TRIONAL IN U.S.A.—The Farbenfabriken vorm. Friedr. Bayer & Co., of Elberfeld, have intimated to the trade in the United States that on and after January 1, phenacetin, sulfonal, and trional will be furnished only in 1-oz. cartons, each containing forty-four 10-grain powders, and each powder having a trade-mark seal on the cutting line. The Farbenfabriken hold U.S. patents for these articles, and the U.S.A. price for them is much above what they sell at elsewhere; hence there has been a good deal of smuggling, so the new style of packing is adopted by them to check the smuggling.

CHEAP MANSLAUGHTER.—Murderously-inclined apothekers should betake themselves to Austria. One October night of last year a man knocked at the door of Apotheker Joseph Wisgrill's pharmacy at Zell am See, in that country. He wanted a prescription dispensed, and the case was urgent. Apotheker Wisgrill thought the man a burglar and went downstairs armed with a loaded revolver, his wife following with a cutlass. The apotheker threw open the door with a "What do you want?" The visitor approached without replying and the apotheker shot him dead on the spot. The murderer has been sentenced to a fortnight's hard labour, of which he will be kept one day without food.

THE MADRAS CREAM-OF-MALT CASE.—The Madras cream-of-malt case still drags along. The charges against the proprietors of the chemists' business in which the bottle of "Kepler's Extract" was substituted for the one of "Cream of Malt" asked for, have been dismissed, as reported by us at the time, but Mr. W. McMorris, the assistant to Messrs. W. E. Smith & Co., who actually sold the Kepler instead of the cream, has been fined 200 rs. and costs, by the Madras Magistrate under section 276 of the Indian Penal Code, which provides that "Whoever knowingly sells, or offers or exposes for sale, or issues from a dispensary for medicinal purposes, any drug or medical preparation, as a different drug or medical preparation, shall be punished with imprisonment of either description for a term which may extend to six months, or with fine which may extend to 1,000 rs., or with both." Defendant's counsel asked the Magistrate to increase the fine by one rupee, so as to secure the right of appeal, but this was refused. The Magistrate's decision, so far as we can judge from the comments of the local papers, is generally censured. Mr. H. L. Wilson, a British pharmacist, has written to the *Madras Mail* strongly disapproving the Magistrate's decision.

Trade-Marks Applied for.

(*From the "Trade Marks Journal," December* 16, 1896.)

Device of nun on label, with wording; for beef-tea specially prepared for medicine and pharmacy. By G. Mason & Co. (Limited), Chelsea Works, Walham Green, London, S.W. 198,724. Essential particular, the device.

"DYTOSE"; for malt-extract digestive bread. By Brown, Gray & Co., 24 York Street, Glasgow, malt-extract chemists' merchants. 198,067.

"AFOLIA"; for perfumery, toilet articles, soap, &c. By J. & E. Atkinson, 24 Old Bond Street, London. 199,540.

(*From the "Trade Marks Journal," December* 23, 1896.)

"MATCHET," and other wording on circular label; for ointment for human use. By The Matchet Company, 4 Old Infirmary Yard, Kirkgate, Leeds. 199,164. Essential particulars, the word "Matchet."

Head of goat with crossed arrows, and wording on circular label; for pills for human use; also for tooth-paste in class 48. By Ann Sargent, Albert Cottages, Edward Road, New Barnet; proprietary article vendor. 199,434, 199,408. Essential particulars, the device.

"ZIL"; for all goods included in class 4. By Anderson's Chlorine Company, 61 Chancery Lane, London, W.C. 199,474.

"SPARKLETS"; for metal capsules to contain compressed gases. By Aerators, Limited, Broad Street Avenue, Bloomfield Steeet, London. 198,134.

"OCTALIS"; for mineral and aërated waters, including ginger-beer. By P. M. Beck, 126 High Street, Shoreditch, London, glass merchant. 199,403.

"KÁKUKÁ"; for perfumery, soap, toilet articles, &c. By W. H. Butcher, trading as Mann's Drug Stores, 45 Rye Lane, Peckham, London, S.E., chemist. 199,408.

"AOLINE"; for perfumery, soap, toilet articles, &c. By J. & E. Atkinson, 24 Old Bond Street, London, W. 199,503.

Device of swan and wording on fancy label; for quill tooth-picks. By H. Hill & Son, 38 Bow Lane, London, E.C. 198,082. Essential particular, the device.

Combination of devices representing cherub holding truss above globe of the world, and wording "The Willardbell Truss," for trusses. By the Accrington Surgical Appliances Company (Limited), 32 Dale Street, Accrington, Lancs. 198,223. Essential particular, combination of devices.

Figure of winged lion of Nineveh; for silicate of soda and potash, disinfecting soap and glycerine. By C. Thomas & Brothers (Limited), Broad Plain Soap and Candle Works, Bristol. 19977-8-95.

(*From the "Trade Marks Journal," December* 30, 1896.)

"NEPTUNE"; "SATURN"; for aniline dyes. By the Badische Anilin and Soda Fabrik, Friesenheimer Landstrasse, Ludwigshafen-on-Rhine, Germany. 197,956-964.

"EMISSARY"; for chemical substances used in manufactures, etc. By S. R. Thompson, 75 Ash Grove, Picton Road, Wavertree, Liverpool, cement manufacturer. 198,998.

"DAYDAWN" and soldier device; for an embrocation for human use. By A. Day, Queen Anne's Buildings, Market Place, Leicester. 197,454.

"HESIMO"; for an embrocation for human use. By J. E. Huff, 94 Well Street, South Hackney, London, N.E., oil and colourman. 198,819.

"KANAX"; for a medicinal preparation for neuralgia, headache, rheumatism, etc. By J. G. Lobbett, trading as Swire & Co., 33 Edgware Road, London, W., chemist. 199,630.

"BULL'S HEAD" and device of same on label with wording, "Colman's Mixed Mustard" etc. By J. & J. Colman, Norwich. 199,301. Essential particular: device and words "Bull's Head."

"MISTRESS OLIVIA," and a scene from "The Vicar of Wakefield"; for an extract and lotion (not medicated) for preserving the skin. By C. A. Mathias, 3 Chaucer Mansions, West Kensington, London, married woman, 198,173. Essential particulars: device and the words "Mistress Olivia."

"LURLINE"; for a preparation for the teeth. By Julia Kevzor, 63 Sutherland Avenue, Maida Vale, London. 198,689.

"MELOPA"; for a preparation for promoting the growth of the hair. By Wallace & Co., 188 Commercial Road, Peckham, London, S.E. 198,821.

(*From the "Trade Marks Journal," January* 6, 1897.)

"TEREZOL"; for chemical substances in Classes 1, 2, and 3; also for mineral-waters in Class 44 By H. F. Cockill & Sons (Limited), Mount View Leather-works, Cleckheaton, manufacturers. 199,862.

Passion-flower device and garden implements; for ointments prepared for use in medicine and pharmacy. By Heinrich Erni, Tschalun Strasse, Oberdorf, Switzerland, doctor of medicine. 197,148.

Map device of Australia and wording, "Faulding's UKA-lyptus oil"; for eucalyptus oil. By S. Barbour, 11 Providence Avenue, Leeds, manufacturing chemist. 191,200 Essential particular: Map device.

"ETLOID"; for chemical substances prepared for use in medicine and pharmacy. By La Société Chimique des Usines du Rhône, 8 Quai de Retz, Lyons, France. 199,476.

"LUNALIGHT"; for baking, egg, custard, and blanc-mange powder. By H. J. Spencer, 221 High Street, Gorleston, Great Yarmouth, grocer, 200,072.

Medallion portrait of child; for perfumed soap. By Melville Wilson Carmichael, 158 New Bond Street, W., manicurist and chiropodist. 196,906.

"ACELIA"; for hair-washes. By S. Cohen, 66 Holborn Viaduct, London, cigar-merchant. 199,316.

Floral device and wording on square label: for a sachet, being perfumery. By R. G. Tugwood, 39 Upper Westbourne Villas, Hove, Sussex, perfumer. 199,657. Essential particular: The device.

Business Changes.

MR. J. H. MAUNDER has succeeded to the Teignmouth Pharmacy, Teignmouth, which has been carried on by his father, Mr. William Maunder, for over thirty years.

MR. COLDWILL, of Ealing, is about to take over the business of Mr. Henderson, Lordship Lane, S.E.

MR. A. E. HOUPTON, late with Messrs. Treacher & Co., Bombay, has taken over Mr. G. F. Jarvis's branch business at Lozells Road, Handsworth, Birmingham. The transaction was effected through advertisements in THE CHEMIST AND DRUGGIST.

MESSRS. THOS. MERRY & SON, drug-brokers, of 139 Fenchurch Street, E.C., announce that they have admitted into partnership Mr. Sydney Robert Johnson, the younger son of the senior partner, who has been associated with the firm for the past fourteen years.

MESSRS. ANTHONY & BISS, chemists and druggists, Bedford, have dissolved partnership. Mr. John Lilley Anthony has taken into partnership with him his son, Mr. E. P. Anthony, who was formerly with Messrs. John Bell & Co., London. Mr. J. W. Biss will continue the dental practice hitherto carried on in connection with the business.

OWING to the death of Mr. Thomas Slater and the retirement of Mr. George Jordan Lee, the partnership existing between that gentleman and David Tansley, trading as "Slater & Co.," chemists and druggists, Stone (Staffs), has been dissolved. The business will be continued by Mr. David Tansley under the style of "Slater, Tansley & Co."

Bankruptcies and Failures.

Re MARK ALFRED BANNERMAN, late of 63 Leadenhall Street, E.C., Sponge Merchant.

UNDER a petition presented at the London Bankruptcy Court, on behalf of a creditor, a receiving-order has been made against this debtor, who carried on business under the style of M. Bannerman & Co. It appears that the debtor left 63 Leadenhall Street last March, and the premises have since been pulled down. He now has no place of business, and resides in furnished apartments. The only assets are shares in public companies of doubtful value. The amount of the liabilities did not transpire.

Re FREDERICK WILLIAM KENRICK, lately in business at Horncastle, and now residing at 182 Carysforth Road, Clissold Park, Stoke Newington, Chemist and Druggist.

THE public examination in bankruptcy of this debtor took place at the Lincoln Bankruptcy Court on December 31, before the Registrar. The Official Receiver stated that the debts were 220*l.* 11*s.*, and that the assets were valued at 2*l.* 5*s.* The examination was closed.

Re FREDERICK MASON, 52 Acre Lane, Brixton, Manufacturer of Meat Essences and Specialities for Invalids.

THIS debtor petitioned the London Bankruptcy Court last Wednesday, and upon the application of his solicitor, Mr. C. W. Laffel, the usual receiving-order was subsequently made by the Registrar. The debtor states that the business, which is of a credit character, is being kept going, but the sheriffs are in possession, at the suit of Messrs. Barclay & Fry, and other creditors. He holds the premises on lease, at a rental of 155*l.* per annum. The assets include stock, 400*l.*, at cost; plant, two horses and two vans, 200*l.*; cash in hand, 20*l.*; book-debts, 600*l.*; and a balance of 3*l.* at the London and County Bank, Brixton. The weekly wages amount to about 15*l.* The liabilities are roughly estimated at 2,500*l.*

Deeds of Arrangement.

Banks, William Orton, 75 Meadow Street, Weston-super-Mare, chemist. Trustee, Charles H. Saturley, 3 Magdala Buildings, Weston-super-Mare, auctioneer. Dated, December 28; filed, January 2. Liabilities unsecured, 126*l.* 11*s.* 4*d.*; estimated net assets, 62*l.* 10*s.* The following are scheduled as creditors:—

	£	s.	d.
Boehm, Gustave, London	10	0	0
Bourne, Johnson & Latimer, London	12	0	0
Droege, Wm. & Co., London	11	0	0
Menzies, F., London	10	0	0
Norman, —, Weston-super-Mare	10	0	0
Tidman & Sons (Limited), London	13	0	0
Warren & Co., Bristol	21	0	0

Davis, Alfred and **Frank Davis,** trading as A. & F. Davis, 14 Trafalgar Road, Old Kent Road, wholesale drysalters and sundrymen. Trustee, Arthur H. Davis, 21 Oglander Road, East Dulwich, traveller. Dated, December 23; filed, December 29. Liabilities unsecured, 79*l.* 3*s.* 1*d.*; estimated net assets, 31*l.* 7*s.* 6*d.* Composition of 7*s.* 6*d.* in the pound by three equal instalments at four, eight, and twelve months from date hereof secured by an assignment upon trust, &c. The following are scheduled as creditors:—

	£	s.	d.
Helaers, London	15	0	0
Trowell, C. F. & Co., London	13	0	0
Rent	10	0	0

Guess, Alfred, 163 Dewsbury Road, Leeds, chemist. Trustee, Alexander Gilmour, 10 Corn Exchange, Leeds, accountant. Dated, December 28; filed, January 2. Liabilities unsecured, 134*l.* 18*s.* 1*d.*; estimated net assets, 10*l.* The following are scheduled as creditors:—

	£	s.	d.
Fourniss & Sons, Leeds	12	0	0
Guarantee Society, London	55	0	0
Hirst, Brook & Hirst, Leeds	14	0	0
Sanderson, A. & Co., Hull	12	0	0

Gazette.

PARTNERSHIPS DISSOLVED.

Anthony, J. L., and **Biss, J. W.,** under the style of Anthony & Biss, Bedford, chemists, druggists, and dentists.

Breaknell, F., and **Nutter, H.,** under the style of F. Breaknell & Co., Burnley, wholesale druggists and drysalters.

Gilroy, R. C., and **Dobbyn, M. G.,** under the style of Gilroy & Dobbyn, Birmingham, physicians and surgeons.

Kearsley, J. H., and **Kearsley, W.,** under the style of the Cleveland Chemical Bone and Manure Manufacturing Company, Kirby-in-Cleveland, chemical-manure manufacturers.

Pearse, R. T., M.D., and **James, J. R.,** Cardiff, physicians and surgeons.

Yates, F., Yates, R., and **Hicks, A.,** under the style of Davy, Yates & Hicks, Park Street, Southwark, S.E., wholesale druggists—so far as regards F. Yates.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDER.

Bannerman, Mark Alfred (sued and trading as M. Bannerman & Co.), late Leadenhall Street, E.C., present address unknown, sponge-merchant.

ADJUDICATION.

Barnes, John Wickham, late Bolt Court, Fleet Street, E.C., now Stamford Street, Blackfriars, S.E., surgeon.

ORDER MADE ON APPLICATION FOR DISCHARGE.

Lathbury, Charles John, Dunstable, late Barton-under-Needwood, Staffordshire, medical practitioner.—The Court, being satisfied that there was no reasonable probability of the bankrupt being in a position to comply with the terms of the order of discharge made on November 22, 1893, rescinded the order, and in substitution therefor ordered that discharge be and was thereby granted from date of that order, July 22, 1896.

New Companies and Company News.

SOOSMEZO SYNDICATE (LIMITED).—Capital 7,000*l.*, in 4,000 "A" and 3,000 "B" shares of 1*l.* each. Objects: To enter into an agreement with the Carpathian Petroleum Company (Limited), and to acquire, develop, and deal with mines, mining-rights, &c., in Transylvania, or elsewhere.

MACKS (LIMITED).—Capital 10,000*l.*, in 1*l.* shares. Objects: To acquire and carry on the business of a hop-bitter brewer and manufacturer of non-alcoholic beverages carried on by William McGuffie, of Rylance Street, Ardwick, Manchester, with certain processes. The first directors are William McGuffie, John Cowper, William H. Yates, and Alexander Milroy.

BLACKMORE, LECONTE & CO. (LIMITED).—Capital 100,000*l.*, in 1*l.* shares. Objects: To adopt an agreement with Charles Blackmore, and to carry on the business of yeast manufacturers and dealers, tea dealers, coffee manufacturers, dealers in grocers' and bakers' sundries, malt extract manufacturers, chemical and sugar refiners, distillers, rectifiers, wine and spirit merchants, brewers, maltsters, &c.

GENERAL OIL EXTRACTING CO. (LIMITED.)—Capital 20,000*l.*, in 1*l.* shares. Objects: To acquire from William R. Harrison, engineer, and Edwin Stephenson, oil refiner, both of Kingston-upon-Hull, certain inventions relating to the method of and apparatus for extracting oil from seed, to enter into an agreement with the said vendors, and to buy, sell, prepare for market, manipulate, crush, import, export, and deal in oils, seeds, fish and other oleaginous substances. Registered office, Imperial Chambers, Bowl Alley Lane, Hull.

WHEELDONS (LIMITED).—Capital 1,000*l.*, in 1*l.* shares. Objects: To acquire, take over as a going concern and carry on the business of a pharmaceutical and dispensing chemist, drug merchant, patent medicine vendor, and homœopathic and general store keeper carried on up to his decease by James Wheeldon and since by his widow, Ellen J. Wheeldon, at 241 Stockport Road, Chorlton-on-Medlock, Manchester, and to enter into an agreement with the said vendor for the

purpose. The first subscribers (each with one share) are:—Mrs. E. J. Wheeldon, George Radcliffe, chemist, and Miss Nellie B. Wheeldon, all of 241 Stockport Road, Manchester; Wm. Armistead, 15 Rupert Street, Wolverhampton, engineer; Edmund S. G. Rees, 15 Merridale Lane, Wolverhampton, engineer; Frederick J. Wheeldon, 76 Long Street, Middleton, Lancs, surgeon; Mrs. Elizabeth Issott, 184 Ardwick Place, Manchester. The management will be vested in a Permanent Chairman and director, and the first will be appointed by the shareholders.

ROSBACH AND JOHANNIS.—It is some time, says the *Daily Mail*, since we called attention to Rosbach Water shares which were then at about 5*s.*; they have since improved to 15*s.*; the idea apparently is that the Johannis Water Company, the biggest shareholder in which is Mr. Gordon, of Gordon Hotels, is likely to buy the Rosbach, which has hitherto not been pushed so much as its shareholders would have liked. The connection between Mr. Gordon and Bovril lends colour to the suggestion, to which we gave prominence some time back, that an ultimate absorption by what may be called the Hooley syndicate is highly probable. An amalgamation between the Johannis and Rosbach Water Companies is not so likely to happen as a purchase outright. But it is all mere market gossip.

BOVRIL.—The last meeting of the old Bovril Company was held at the Cannon Street Hotel on Tuesday. Mr. J. Lawson Johnston presided, and reported, on behalf of the liquidators, that they had been paid their 2,000,000*l.*, and the money was now lying at the bank ready to be distributed among the shareholders. After the meeting had confirmed the resolutions passed at the last meeting, Mr. Johnston proposed a resolution empowering the liquidators to distribute among the *employés* "and others, in such manner and proportions as they shall think fit, and as an acknowledgment of the services rendered by the recipients to the company, such a sum not exceeding an amount representing 5*d.* per share on the shares as the liquidators may determine." This was carried, though the chairman intimated that there had been some demur to it. It appeared that he and Mr. Andrew Walker had decided to accept nothing for their services as liquidators.

OFFICIAL NOTICES of meetings under voluntary windings-up are given in regard to the

Stott Fertilizer and Insecticide Distributor Company (Limited). At the Grosvenor Hotel, Manchester, on February 2, at 3, for an account of the winding-up. And the

Victoria Soap Company (Limited). At the offices of the New Patent Candle Company (Limited), Sutton Road, Plymouth, on February 4, at 11, to receive the liquidators report of the winding-up.

Marriage.

HOCKEN—MASON.—October 29, at St. Andrew's Church, Braidwood, near Sydney, N.S.W., by the Rev. J. S. Dobson, James Preston Hocken, M.D., J.P., West Wallsend, eldest son of Mr. J. Hocken, chemist, Oldhall Street, Liverpool, to Helen S., daughter of Mr. F. Mason, J.P., Yately, Braidwood.

Deaths.

DAVIES.—On December 17, Mr. W. E. Davies, chemist and druggist, Cardiff. Aged 52.

SHOEMAKER.—The *Pharmaceutical Era* reports the death at Philadelphia, on December 7, of Mr. Robert Shoemaker, Vice-President of the Philadelphia College of Pharmacy, and senior member of the firm of Robert Shoemaker & Co., wholesale druggists, of that city. Mr. Shoemaker was 79 years old and was the oldest wholesale druggist in Pennsylvania. After his experience in the retail drug-trade, Mr. Shoemaker, in 1856, entered the wholesale business in conjunction with his brother, Benjamin H. Shoemaker, and, taking his sons, Richard, Thomas, and Benjamin, into partnership, established the firm of Robert Shoemaker & Co. While still a retailer, Mr. Shoemaker manufactured plasters, and by some he is thought to have been the first manufacturer of glycerine in the United States. A specimen of glycerine made by him in 1846 is still on exhibition in the Philadelphia College of Pharmacy. Mr. Shoemaker was a staunch friend of the Philadelphia College of Pharmacy. In 1869 he was elected its Vice-President, and in 1894 the College conferred upon him the honorary degree of Master of Pharmacy.

WHITE.—On December 21, at Earl Shilton, Leicestershire, Gerald Player, the beloved child of N. S. and M. P. White. Aged 3 years and 8 months.

New Books.

Alexander, Thomas. *Pharmacopœia of the Royal Infirmary, Edinburgh; also formulæ in use in the Out-patient Department of the Hospital for Sick Children.* 2nd ed. 32mo. 178 pp. (James Thin.)

Annals of Botany. Vol. 9, No. 40. 8 vo. Sewed. 14*s.* (Frowde.)

Austen, Peter T., Ph. D. *Notes for Chemical Students.* Second edition. First thousand. 8vo. Pp. vi. and 112. Cloth. 6*s.* 6*d.* net. (New York, and Chapman & Hall, London.)

Bartholow, R. *Practical Treatise on Materia Medica and Therapeutics.* 9th edit. Revised. 8vo. 21*s.* (H. K. Lewis.)

Buck, Albert H., M.D. *A Vest-pocket Medical Dictionary, embracing those terms and abbreviations which are commonly found in the medical literature of the day, but excluding the names of drugs and of many special anatomical terms.* 12mo. Morocco cover. Pp. vi. and 527. 3*s.* net. (New York, and Baillière, London.)

Harcourt, A. G. V. and Madan, H. G. *Exercises in Practical Chemistry.* 5th edit. revised by H. G. Madan. Crown 8vo. Pp. 614. 10*s.* 6*d.* (*Clarendon Press Series.*) (Frowde.)

Herschell, Geo., M.D. *Cycling as a Cause of Heart-disease.* Small 8vo. Pamphlet. Paper cover. Pp. 44. 1*s.* (Baillière.)

Hooper, E. Grant, F.I.C., F.C.S., and others (Editors). *Ham's Inland Revenue Year-book*, 1897. Twenty-first year. A book of general reference and of special information on the Revenue and Licensing Laws, income-tax, and death-duties. Prepared from official records and published by special permission of the Hon. Commissioners of Inland Revenue. 8vo. Pp. 614. Cloth. 4*s.* 6*d.*, or small edition 3*s.* (Effingham Wilson.)

Kneipp, Sebastian. *The Care of Children in Sickness and Health.* Cr. 8vo. Pp. 280. 5*s.* (Grevel.)

Moyes, J. *Medicine and Kindred Arts in the Plays of Shakespeare.* Crown 8vo. Pp. 140. 2*s.* 6*d.* net. (Maclehose.)

Mulhall, M. G. *Industries and Wealth of Nations.* Crown 8vo. Pp. 464. 8*s.* 6*d.* (Longmans.)

Oldberg, O. *Pharmaceutical and Chemical Problems and Exercises in Metrology, Percentage and Proportion, Fortification, Dilution, Specific Weight, Thermometry, and Chemical Reactions.* With rules and explanations, &c. 3rd edit. 12 mo. 7*s.* 6*d.* (Chicago, and Sampson Low, London.)

Piesse, S. *Chimie des parfums et fabrication des essences Extraits d'odeurs, eaux aromatiques, pommades, &c. Edition Française.* Par F. Chardin-Hadancourt, H. Massignon, et G. Halphen, 1896. 8vo. Cloth. Pp. 397. With 78 illustrations. Fcs. 4. (Baillière et fils., Paris.)

Ramsay, Wm., F.R.S. *The Gases of the Atmosphere: the history of their discovery*, 8vo. Cloth. Pp. viii. and 240, with portraits. 6*s.* net in Great Britain. (Macmillan.)

Reynolds, E. S. *Hygiene for Beginners.* 100 illustrations. 12 mo. Pp. 250. 2*s.* 6*d.* (Macmillan.)

Richards, P. A. E. *Guide to the Examination in Practical Chemistry* for the Conjoint Board. 12 mo. Pp. 58. 2*s.* 6*d.* (Baillière.)

Theobald, F. V. *The Parasitic Diseases of Poultry.* Illustrated by the author. Cr. 8vo. Pp. 136. 2*s.* 6*d.* (Gurney & Jackson.)

Thudicum, J. L. W. *The Progress of Medical Chemistry: comprising its Application to Physiology, Pathology, and the Practice of Medicine.* Crown 8vo. Pp. 212. 5*s.* (Baillière.)

Novelties.

CYMRALIS WATER.

UNDER this name, Messrs. R. Ellis & Son, of Ruthin, have introduced a new table-water to meet the growing demand for a spirit diluent and corrective differing from potash and seltzer, and more resembling the imported natural table-waters. "Cymralis" is a water remarkably free from organic impurity, and containing traces of alkaline salts and calcium and magnesium in combination with the hydrochloric and sulphuric radicles. It is well aërated, and when poured out maintains its sparkle for fully twenty minutes, while we noticed that after standing in a half-filled open bottle there was a distinct effervescence at the end of an hour and a half. This is a characteristic which will be appreciated. "Cymralis" goes well with whisky, bringing out the flavour nicely. It is put up in the same style of bottles as natural table-waters, and is offered at a reasonable price.

NEW SYNTHETIC PERFUMES.

WHETHER synthetic perfumes will ever supplant the natural flower distillates and other natural scents is a question that few perfumers would care to answer in the affirmative. But, as has already been proved in the case of vanillin, cumarin, and others, some of the artificial articles can undoubtedly gain a commercial place along with the natural ones, even if not altogether on equal terms with the last-named. The advocates of the artificial scents say that by using them the perfumer will be safe from the annoying price-fluctuations and frequent abnormalities in the supply which form such a disturbing feature in the use of the natural articles, and from the danger of inferior fixing-agents, such as fats and oils, which are liable to decomposition. The advance in our chemical knowledge of the constituents of essential oils naturally tends to bring into the market an ever-growing number of manufacturers of synthetic perfumes from coal-tar. One of the most recent competitors in this field of industry is the Société Chimique des Usines du Rhône, of Lyons (British agents, Messrs. R. W. Greeff & Co.), who send us a selection of samples of about a dozen artificial perfumes manufactured by them. The one that attracts us most is the "Rhodinol," which is chemically identical with the principal, constituent of otto of rose. It is made in two qualities, both colourless liquids, possessing an intense rose odour. Both are recommended for soap-making and for the preparation of "extraits" and oils, but the No. II. quality is more concentrated and purer than the No. I. In connection with this article it is useful to recall the fact that there are now three artificial rose odours in commerce: Rhodinol, which, according to the name, is identical with the principal constituent of otto of rose; Geraniol, which claims a like relation to the chief constituent of geranium oil; and Réuniol. The last, has been named after a terpenic alcohol supposed to exist in Réunion geranium oil along with geraniol. According to some investigators, however, there is no such body as Réuniol. Messrs. Greeff's selection contains such old stagers in the perfume-line as cumarin, heliotropin, terpineol and vanillin, concerning which the older manufacturers will look with mixed feelings upon the advent of a new competitor in an already overstocked market; but it also includes specimens of artificial scents less generally quoted and used; "Flouvane" (Spring-grass), for instance, and "Foin Coupé," which is our old friend New Mown Hay gallicised. Flouvane is a bright-yellow liquid, soluble in all proportions of 75 per cent. alcohol and in sweet-almond oil, and free from acids. It has a peculiar and very intense odour, and is specially recommend as a soap-perfume. New Mown Hay can be obtained either in the liquid form (for soaps and scents) or in minute white crystals (for sachets).

Trade Notes.

WE inadvertently stated a fortnight since that Messrs. S Maw, Son & Thompson's new enema is 35*s*. a doz. It is only 30*s*.

A GERMAN JUBILEE.—On January 2 the well-known Hamburg wholesale drug-firm of G. Lipman & Geffchen celebrated the 150th anniversary of its establishment.

MESSRS. ALLEN & HANBURYS, Plough Court, Lombard Street, E.C., have become the agents for Great Britain and the colonies of the Pasteur Institute at Lille, and have received a supply of the antivenomous serum.

IN describing Mr. Wallas's new pharmacy in Oxford Street, W., we referred to the exceptionally good style of bottles and shop-rounds which are used in it. We understand that these were supplied through Messrs. H. Poths & Co., 3 Creechurch Lane, E C., who have made this particular kind of glassware a special feature of their business for many years.

WE were not aware when we were writing an appreciative note (*C. & D.*, December 26, page 912) of Messrs. Fuller & Co.'s "Christmas Welcome," that we were complimenting Mr. Whitworth Hird, the advertising specialist. But it is so. He prepared it for Messrs. Fuller. Any chemist who wishes to get a copy of the "Christmas Welcome" post free should write to Mr. Hird, Clulow House, Mill Hill Road, Norwich.

MESSRS. DELBANCO & CO., 9 Mincing Lane, E.C., have been appointed agents for Dr. Mehrlaender & Bergmann, Hamburg, and they hold stock of essential oils, fruit and soluble essences, and soap colours of that firm's brand. Messrs. Delbanco have sent us samples of three new fruit-flavours which they are introducing here. They are oil of apples, oil of bananas, and oil of pears, one part of each of them being equal to three parts of similar fruit-flavours hitherto offered. There is no question of the great strength of these flavours, and their close identity with the natural fruits. The firm quote these and other ethereal or alcoholic products in bond as well as warehouse.

MESSRS. CORNEILLE DAVID & CO. notify their removal to larger and more commodious offices at 4 Fenchurch Avenue. This will be the address in future, instead of 9 Fenchurch Avenue. The offices of the Liebig's Extract of Meat Company (Limited), for whom the firm are sole agents, will still remain at 9 Fenchurch Avenue. Messrs. Corneille David & Co. will, as hitherto, act as agents for the Liebig's Extract of Meat Company (Limited), and sell the Company's preparations, such as Liebig Company's extract of beef, "Peptarnis" (peptone of beef), and Fray Bentos tongues, in addition to the sale of the "H.-O. breakfast food," "Geraudel's Pastilles," "Mikado" and "Golden Morn" fruits, and other specialities for which they are agents in this country.

MR. THOMAS CHRISTY, F.L.S., sends us a new part (No. 12) of his "New Commercial Plants and Drugs." The present addendum to the series is only a six-page leaflet, and treats exclusively of *Dimorphandra Mora*, the new kidney bean or false kola from San Domingo, which has lately appeared on our markets. A namesake of Mr. Christy, a medical man, who had just returned from San Domingo when the "kolas" in question arrived, reported that he had often seen the fruit growing at Puerto Plata, in that island. But he had no further information to give. Mr. Thomas Christy has hunted up a paper by Dr. Robert Schomburgk, read to the Linnean Society on March 20, 1838, in which the "Mora" tree of Guiana is fully described and its flowers and seeds are figured. Mr. Christy, in his pamphlet, reproduces Schomburgk's plates, which agree with the seed shown in the London market. It is worthy of note that, while one parcel of the seed sold in London at 1*d*. per lb., another lot fetched 11*d*. per lb. at sale in Paris.

MR. JAMES TOWNSEND, medical label printer, of Exeter and London, is sending to those who ask for it a very nice

office calendar 6 inches by 5 inches with a month on each sheet, the figures being ½-inch long, so that they can be read at a distance of several yards. In addition to the months the calendar contains sheets of postal information, and useful fiscal and other items which one often wishes to know. The style in which the calendar is produced is novel, and for that alone many may wish to see it. Copies can be had either from the works at Exeter or the branch office, 2 and 3 Stonecutter Street, E.C.—Mr. W. Turver, chemist, Chester, in sending us samples of a pocket almanac and a small note-book which he has distributed to his customers, says that "after trying the various almanacs, &c., finds these small ones more appreciated, gladly accepted, and kept."—Messrs. J. Leonard & Co., apothecaries, Dublin, also send us copies of a "Domestic Year Book" and monthly magazine which they give to their customers.—Messrs. W. F. Wells & Son, chemists and druggists, Dublin, publish a handsome little almanac, the cover of which is printed in colours and gold; besides well-arranged business advertisements it contains useful local information.

Personalities.

MR. A. SEARL, F.C.S., lately the manager of Messrs Burroughs, Wellcome & Co.'s factory at Dartford, has accepted an appointment with the Bovril Company (Limited).

MR. SOL. TAYLOR, who left Messrs. Oppenheimer, Son & Co. (Limited) some time ago to look after the interests of Messrs. Duncan, Flockhart & Co. in London, has left the latter firm, and rejoined the staff of Messrs. Oppenheimer, Son & Co.'s representatives.

THE Warwickshire police have succeeded in elucidating the mystery surrounding the disappearance of Tom Griffiths, the son of a Leamington chemist, who left home about a month ago for a bicycle ride, and was never seen again. It has been ascertained that Griffiths, who was 18 years of age, has been found drowned in the river Avon, at Halford Bridge, near Littington, Warwickshire.

THE defendant in the case reported last week under the title of "The Wholesale Druggist and the Publican" was, we find, a Mr. Harper, and not Mr. Barker, as there stated. It happens that there is a Mr. Barker, a chemist, in the near neighbourhood, and though our report stated that the defendant was the landlord of the Middleton Arms, we accede to Mr. Barker the chemist's wish, by stating that he was not in any way concerned in the case.

AT a celebration of the Festival of St. John, at the Masonic Lodge, St. Vigean (No. 101), held at Arbroath, on December 29, Bro. James Jack (pharmaceutical chemist) was presented with a very handsome Past Master's jewel in recognition of the highly efficient manner in which he had conducted the duties of the chair for the past four years, and of the esteem in which he is held by the members of the Lodge. Bro. A. D. Lowson, Past Master of the Lodge, in making the presentation, said that during the four years that Bro. Jack had held the position of Master he had initiated seventy-three members.

THE late Mr. Alfred Nobel, the Swedish chemist, who died in France the other day, has bequeathed the whole of his fortune, with the exception of a few small legacies, in trust for the purpose of using the interest to give prizes for scientific research and discovery to investigators, without distinction of nationality. The annual interest is to be divided into five equal portions. The first of these is to be allotted as a prize for the most important discovery in the domain of physics, the second for the principal chemical discovery or improvement, the third for the chief discovery in physiology or medicine, the fourth for the most distinguished literary contribution in the same field, and the fifth to the person who is judged to have done most to promote the cause of peace. The fortune, which was mostly made out of nitro-glycerine, is estimated to amount to nearly 2,500,000*l.*, of which about 2,000,000*l.* will form the capital-fund.

Practical Notes and Formulæ.

WHITE SHELLAC.

THE solubility of shellac in spirit is frequently impaired by bleaching. The defect may be remedied by moistening the white shellac with a little ether before treating it with spirit.—*M. B. Druggist.*

BROWN-BOOT POLISH.

IN 35 oz. of turpentine dissolve, by means of a gentle heat, 10½ oz. of yellow wax, and allow to cool. To this add a mixture of 4¼ oz. of resin-soap, and 35 oz. of water, and mix thoroughly. Then add 5 gr. of Nankin brown, dissolved in ʒss. of S.V.R.

LIQUID GLUE.

A RECENT German patent describes a process for making liquid glue—viz.: 100 parts of glue are softened in 150 parts of water, after which 10 parts of salicylate of soda are added, the mixture being heated in a water bath until the glue is thoroughly dissolved. Then add 1 drop of oil of cloves to each ounce of the mixture. The salicylate keeps the glue from setting in the pot.

FROSTBITE-SALVE.

Acidi carbolici	ʒss.
Ung. diacylon.	ʒx.
Lanolini	ʒx.
Ol. olivæ	ʒv.
Olei lavandulæ	♏x.

Fiat unguentum.

TABLE BLUE.

Superfine ultramarine	℥iv.
Ordinary ultramarine	℥ij.
Sodium carbonate	℥iv.
Glucose	ʒix.

Mix and make into a stiff paste by the aid of water, roll out into a thick sheet and cut into cubes, which dry at a gentle heat.

—*Bull. of Pharmacy.*

COLD-CREAM.

DUCRO advocates the addition of a little lanoline to ordinary cold-cream, as in the following formula:—

White wax	℥iiss.
Almond oil	℥ix.
Lanoline	℥j.
Melt and stir in—	
Rose-water	℥ix.

The lanoline much facilitates the manipulation, and a more uniform product is obtained.

HOW HONEY IS RENDERED.

AN extractor is used in the United States. The extractor is a thirty or forty gallon tin can, inside of which is a revolving reel, with gearing and crank attached. Inside this reel is placed the comb of honey, and by turning the crank the reel revolves, and the honey is dislodged from the comb by centrifugal force. The comb, after being emptied of its contents, is placed back in the hive to be refilled, as it is not injured in the least by extracting. The saving of the comb in this manner is quite an item, as bees consume twenty pounds of honey to produce a pound of wax.

TOOTH-POWDER FOR TARTAR.

WHEN there is tartar on the teeth the following powder is effectual:—

Saccharin	gr. iij.
Menthol	gr. xv.
Boric acid	ʒss.
Salol	ʒj.
Powdered soap	ʒijss.
Precipitated chalk	ʒv.
Carbonate of magnesia	ʒv.
Essence of peppermint	♏xv.

Mix and sift.

If there is a great deal of tartar and the teeth are only cleansed with difficulty, the addition to the above powder of ʒj. of pumice powder to ℥ij. is advantageous.

Scientific Facts and Opinions.

THE last number of the *Journal of the Chemical Society* for 1896 is exceptionally good, the text of eighteen papers communicated to the Society being given in it. Of these, perhaps the most generally interesting is one by Mr. Seihachi Hada, B.Sc., a Japanese chemist, which tells how mercuric and mercurous salts change into each other. This paper is likely to be of direct technical value, for it brings out several facts regarding mercury and its compounds which were noticed by chemists at the beginning of this century, but have been overlooked by the past generation or two of chemists. For example, Mr. Hada finds that metallic mercury distils with steam, and vaporises at the normal temperature. Proust noticed the distillation fact in 1816. One of the most striking points about Mr. Hada's results is that mercurous salts are not so easily oxidised as is generally supposed, and that the presence of water is essential to the change, or some water-like substance, such as acids. Carbon dioxide is more potent in effecting change from the Hg′ to the Hg″ state than is oxygen, and both light and heat are material factors in promoting the change; indeed, the fact seems to be that if we can get mercurous salts pure—*i.e.*, free from mother liquors, water and alkali salts—and keep them in a dark place, they cannot change into the mercuric state. When calomel is boiled with water a small portion of it is decomposed thus:—$Hg_2Cl_2 = HgCl_2 + Hg$, the mercuric chloride being dissolved in the water, and the mercury passing off with the steam. In a closed vessel the decomposition is not so marked because the mercury and mercuric chloride recombine. The practical result of the experiments on calomel is that if kept in a well-closed bottle it undergoes no oxidation. "So far as can be ascertained mercurous oxide is the only mercury compound that does oxidise at the common temperature, or even at 100°." The oxidation amounts to 0·004 per cent. per diem, or less than 1·5 per cent. a year.

Mercury Salts.

In the abstracts portion are several notes which are of interest to pharmacists. Koenigs and Husmann have obtained cinchonidine by boiling pure cinchonine with amyl-alcoholic potash for fifteen hours—the yield was about 5 per cent. (page 707). Several papers on malt and its constituents by Osborne and Campbell are abstracted on pages 714–6, and in one of them the authors say "it is possible to roughly judge of the diastasic power of a preparation by heating a portion of its solution to 65° C., and observing the amount of coagulate formed." This is a hint for the comparison of malt-extracts which some assistants' association young man should follow up.

Cinchonine and Malt.

Collie and Ramsay's Royal Society and Academy of Sciences papers on argon and helium are referred to on pages 633 and 645. The former deals with the detectability of the gases and their behaviour towards the electric discharge, and the facts bring out strongly the quite unearthly characters of helium. For example, while 0·001 per cent. of hydrogen can be detected in helium, it is difficult to detect 10 per cent. of helium in hydrogen. The Paris paper deals with the diffusion experiments on argon and helium. Several other papers on the new elements are mentioned on pages 655–6, including one by Professor Tilden, who has been bitten, and finds that cleveite and similar helium-containing minerals hold it in the occluded state. Peterhead granite does not contain helium, but on heating it yields almost its own bulk of a gas, one-fourth of which is carbon dioxide and the rest hydrogen.

Argon and Helium.

The *Lancet* has tried to settle the question of food-preservatives by asking a few eminent physiologists and therapeutists what they think about the use of them. The results are given in our contemporary's issue of January 2, pp. 56–60. The questions asked were:—Are antiseptics injurious? Should they be forbidden by law or their use legally sanctioned? Should preserved articles be labelled? Sir Henry Thompson, Dr. Pavy, Professor F. J. Allen (Birmingham), Dr. Sims Woodhead, the late Sir B. W. Richardson, Dr. Lauder Brunton, Sir William Roberts, Dr. W. D. Halliburton, Dr. J. B. Bradbury (Cambridge), and Dr. Whitelegge wrote replies. The only one who has found evidence of injury is Professor Allen. He thinks boric acid by combining with calcium and magnesium (perhaps also iron) removes them from the animal economy; and Dr. Halliburton quotes a conversation with Professor Allen in which the latter mentioned cases of ill-health in children, so that it is rather awkward that these cases are not referred to in the professor's letter. Sir B. W. Richardson, Dr. Brunton, and Dr. Bradbury defend the use of antiseptics in small quantities, the first-named being the most outspoken. "When used in proper form and quantity they cause no injury whatever to the consumers," he wrote. Dr. Brunton says:—

Food-preservatives.

> I think one must remember that poisons are actually formed from foods by their spontaneous decomposition, and that foods which might be perfectly good and harmless at the time they were sold might be allowed by the purchaser to remain lying in a warm place for such a time that spontaneous alterations might occur in them, and illness, or even death, might result from their consumption. . . . The question really comes to be whether the acids, salicylic, boric, or benzoic, which are added to prevent decomposition, are likely to be more injurious to health than the natural products of decomposition which would be formed were the preservative not added. My own belief is that the preservative acids are likely to be considerably less injurious to health than the natural products of decomposition.

Sir William Roberts does not give an opinion; the other letter-writers think that the too free use of antiseptics is prejudicial to health; and all the gentlemen named (except Professor Allen) are of opinion that their use should not be forbidden, and if used the fact should be stated by the vendor. All agree that salt should be excluded from any regulations that may be formed, but lack of direct evidence against boric acid and salicylic acid is the net outcome of the inquiry.

In connection with this matter we cannot resist quoting some figures from a lecture recently delivered by Dr. A. A. Kanthack at the London Institution. The best samples of London milk, he says, contain 250,000 micro-organisms per c.c.—*i.e.*, 80,000,000 in a penny glassful—but ten times that number is common enough. And they increase and multiply so rapidly that there would not be much of the milk left for poor Londoners were it not for borax. It may be remembered that the street-sellers of ice-cream have been recently condemned for throwing in such a multitude of microbes with their ha'p'orths. We joined in the cry against them. Dr. Kanthack rebukes us all, for he says that while the Italian barrowman gives two to five million microbes with each cubic centimetre of ice, the high-class West-end restaurateur gives us ten to fourteen millions. But ice-cream is a desert beside a sandwich, "a millionth part of which contains innumerable micro-organisms." Dr. Kanthack has eaten four to six of these sandwiches every day for the past twelve months, and was sufficiently alive to tell his audience that the richest dishes from the best cooks are perfect flora of microbes, and that we ourselves, outside and in, are literally covered with all kinds of them, even pathogenic, which, seems the natural condition of things. The lecture is printed verbatim in *Nature* of December 31, and is well worth reading.

Bacteria We Eat.

Notes on Essential Oils.

FROM THE LABORATORIES OF MESSRS. W. J. BUSH & CO.

Oil of Elderflowers.—This oil is yielded in very small quantity by elder blossom on distillation with steam. It is solid at ordinary temperatures, having a melting-point of 28°C., and sp. gr. $\frac{30°}{15}$ C. of 0·8277. It appears to consist, like otto of rose, of a liquid portion, to which the fragrance is due, and an inodorous stearoptene, which may be separated by washing with alcohol, in which it is almost insoluble. When purified in the manner employed by Umney for the stearoptene of otto of rose—viz., solution in chloroform and precipitation by alcohol, it was found to have a melting-point of 39·5°C. The rose stearoptene melts at 33° to 34°C., but, according to Schimmel, may be separated into two fractions, one of which melts at 40°C. The stearoptene constitutes 42 per cent. or more of the oil, but very possibly its proportion may be largely influenced by climate, as in the case of otto of rose. The liquid portion has not yet been examined chemically, but has the exact fragrance of fresh elder-blossom.

Oil of Petitgrain Citronnier.—This is distilled from the leaves and twigs of the lemon tree in the same way as ordinary petitgrain is from the orange tree. Our product has an odour resembling the orange petitgrain, but less intense and with a blending of the odour of lemon. Its sp. gr. is 0·878 at 15° and rotation in a 10-cm. tube + 9·4°. It makes a turbid mixture with ten times its volume of 80 per cent. alcohol, but is readily soluble in its own volume of 90 per cent. It contains esters equivalent to 10·1 per cent. of linalool and also 11 per cent. of aldehyde (citral). Orange petitgrain has a sp. gr. of 0·890 to 0·895, is slightly lævo-rotatory, is soluble in two volumes of 80 per cent. alcohol, and contains esters equivalent to 40 per cent. and upwards of linalool. A sample of petitgrain citronnier has also been reported on by Schimmel & Co., who found the sp. gr. to be 0·869 at 15°, rot. + 34°, ester content equivalent to 4 per cent. linalool, and that it was not soluble in 3½ volumes of 90 per cent. alcohol. Apparently this sample must have been distilled from material containing a large proportion of immature fruits, as the characters are intermediate between those of our sample and those of ordinary lemon oil from the peel.

Otto of Rose.—With respect to otto of rose, we can so far confirm Mr. J. C. Umney's figures for the average composition of Turkish otto, that a sample examined by us in November 1895 gave just 72 per cent. of alcohols (reckoned as $C_{10}H_{18}O$), of which 4·3 per cent. was in the form of esters. We think his limits of solidifying-point and sp. gr. are rather too narrow, however, as we have had Turkish oils with a solidifying-point as low as 19°C., and others with a sp. gr. as low as 0·860 at 20°C. (about 0·852 at 30°C.) in which we were unable to detect by the nose, or otherwise, any inferiority to standard samples. It must, of course, be borne in mind that these proportions of stearoptene to alcohols relate only to Bulgarian otto, in which they happen to be fairly constant. We distil considerable quantities of otto at Grasse, and we find that different fractions of the oil vary enormously in proportional composition and also in fragrance. The first third of the total yield from each batch is very rich in stearoptene, but neither so strong nor so pure in odour as the remainder. The difference in composition will be seen by the following figures:—

	First third	Remainder
Solidifying-point	26° to 27°	5° to 6.5°
Sp. gr. at 20°C.	0·8189 to 0·8224	0·8812 to 0·8838
Rotation	$(\alpha)_D$ − 4° to − 5°	− 1·9° to − 2·5°
Colour	Greenish	Yellow

The amount of stearoptene appears also to be influenced by the wetness or dryness of the season, and also to vary in the earlier and later gatherings of the same crop.

BY FOREIGN CHEMISTS.

Following upon the foregoing notes by Messrs. W. J. Bush & Co., and in continuation of recent contributions on this subject, we give some notes from recently published papers by French chemists. Dupont and Guerlain report upon the characteristics of French otto of rose and Bulgarian otto as follows (*Jour. de Phar. et de Chim.*, 1896, page 512):—

	French, 1895.	French, 1896.	Bulgarian.
Sp. gr at $\frac{30°}{15}$ C.	0·8225	0·8407	0·8650
Rot. pow. 30° C. (l = 100 mm.)	−6° 45′	− 8° 3′	− 3° 30′
Stearoptene p.c.	35	26	6 to 13

The French otto they find to have a much better odour than the Bulgarian, which they say has a certain empyreuma (*goût de feu*). The stearoptene was separated from the otto by treating with 75 per cent. alcohol, in which it is almost insoluble, filtering, evaporating the filtrate at a reduced pressure, cooling to −20° C., and again filtering, uniting the two fractions of stearoptene so separated. They account for the difference between the stearoptene percentage in the 1895 and 1896 ottos by the excessively cold season of 1895; the climate of the countries in which the rose is cultivated has an influence, they say, upon the richness of the otto in stearoptene, and the greater the cold of the region the higher the point of fusion of the otto produced. The authors have found an ether in the French otto terpenes which is strongly lævorotatory. The ether is saponifiable by prolonged ebullition with water, and to this fact they attribute its absence from Turkish otto, which is made in old-fashioned stills heated by an open fire; and as the same water is used over and over again the ether is decomposed.

In a paper by Duyt abstracted in the last issue of the *Journal of the Society of Chemical Industry* it is remarked that the statement of certain authors that the stearoptene will change by gentle oxidation into the eleoptene cannot be practically confirmed. Pure Turkish otto contains 9 to 13 per cent. of stearoptene, and melts at 16° to 21° C. German otto contains 26 per cent., and melts at 27° C. Other pure samples, especially French, have a lower melting-point; thus the melting-point is no criterion of purity. The solid otto of roses should be spangled with crystalline plates, which, on melting by the heat of the hand, should rise to the surface of the liquid. The stearoptene obtained by dissolving in chloroform, adding alcohol of 75 per cent. strength, washing and drying, should have a constant melting-point. The addition of strong sulphuric acid to five drops of otto produces a thick reddish-brown mass, which, in the absence of oil of geranium, &c., will not evolve any acrid tarry odours. The pure otto has a density of 0·865 to 0·880 at 20° C.

Mellin's Art-exhibition.

A PROCESSION of forty or fifty sandwich-men, calling attention to "Mellin's Food Art-exhibition," attracted our art-critic to the Queen's Hall, Langham Place, the other day. The exhibition opened on Monday and will close on Saturday. It appears to be a wonderful success. Between 4,000 and 5,000 pictures have been sent in, and these are all conveniently hung in the spacious and handsome hall. They comprise oil and water-colour paintings and photographs. The company give 1,000*l.* in prizes, and they have got Mr. Solomon J. Solomon, A.R.A., Mr. J. Fraser, and Mr. L. Rivers to judge the paintings, and Mr. H. P. Robinson, Rev. F. C. Lambert, M.A., and Mr. B. Alfieri as judges of the photographs. The work shown is, of course, very various both in subject and merit, but there are plenty of pictures well worth looking at. Mr. H. J. Dobson takes the first prize of 100*l.* in the open competition for oil-paintings for a picture, "The New Toy"; and Rentra Pollard is credited with the first prize (50*l.*) for a water colour, "First Fruits of Autumn." The highest prize in the photographic section (20*l.*) goes to A. J. Taylor, of Cape Town. The prize-pictures belong to the company (or to Mr. Mellin personally, we are not sure which), and the others are priced, or some of them may be sold by auction. In either case, 25 per cent. of the proceeds is to go to some charitable institution to be selected by the directors of Mellin's Food (Limited). A very few competitors have chosen subjects of special Mellinistic interest, but we do not think any of these have secured prizes. In the middle of the ground floor there is a tasteful and imposing display of Mellin's Food and other preparations, and the Maypole Company also have a stand. The exhibition is an interesting indication of a modern development of advertising, and of the courage with which some of our great advertisers launch into artistic enterprises.

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Editorial Comments

DRUG-STORES AND DISPENSING.

THE Drug-Store Man's Experiences which we published last week suggested several points worth considering. The teaching may not have been very recondite, and it certainly was not associated with any sentiment. Far indeed was it removed from any reminiscence of that "personal element" concerning which Mr. William Day discoursed so touchingly a fortnight previously. Compare the system of buying recommended by the "drug-store man" of to-day with that which prevailed in the middle of the century. Then the

traveller who came round was the personal friend of the chemist. Orders were saved up for him. The "house" charged handsome prices, no doubt, but it was an honour to deal with them, and there was no such thing as bargaining. Now our adviser tells us "considerable saving can be effected" by dealing simultaneously with two of the cheapest houses, "comparing their prices for each article"; matching one against the other, in fact. And these great houses, some of them the direct descendants of the blue-blooded old firms who autocratically divided the country among themselves fifty years ago, submit to this; court it, even. How have the mighty fallen! And as with buying, so with selling. The stores know nothing of clients, customers, friends—they simply look to "the public." A homogeneous mass of people outside, a certain percentage of which can be compelled, or induced, to buy a certain amount of physic. The virtues of that physic are of minor consideration; the get-up is the main thing. The articles are saleable or unsaleable "lines"; "most stores have wonderfully complete sets of put-up remedies." To do them justice, they make no pretence of having studied for years before discovering the valuable combination of herbal medicines from which they have extracted Blank's marvellous elixir. They choose, if they can get him, "a mature, substantial-looking man," provided he can work, because, like the glass show-cases, he is what is expected in a chemist's shop. As an exposition of what is termed up-to-date pharmacy, the article is, as we have already said, well worth the attention of all interested in pharmaceutical history or progress.

But there is one passage in it to which we may direct particular attention. We reprint the paragraph concerning dispensing, for the benefit of chemists who may not have read to the end of the article:—

Surprising though it may be at first thought, stores do not encourage dispensing in many cases. This is, no doubt, partly because good prices cannot now be got, from the fact that prescriptions are so often repeated at different shops, thus ranking with patents as standards to test the cheapness of a store. Then making-up and copying a prescription takes up, on an average, as much time as serving half-a-dozen customers, and yields perhaps only 3*d.* profit. On any half-dozen customers the profit would greatly exceed 3*d.*; hence a dispenser's time is of less value than a counterman's, though his salary is usually higher. As regards dispensing, the stores simply say, "We take what comes and do it well, but do not push the department."

It is something of a shock to treat the venerated dispensing-department—the altar of the pharmacy—with such unceremonious disrespect. In old times the rank of the pharmacy was gauged, first, by the number of prescriptions dispensed, and, secondly and principally, by the prices obtained. The chemist took an artist's pride in his dispensing, and at the same time looked upon it as the chief financial prop of his business. It never was this in one case out of a hundred. Many of the old druggists whose names we revere made more out of Holloway and hair-oil than they did out of all their dispensing, but would have turned sick if they had ever realised this. The lustre has gone out of dispensing from a pecuniary point of view this many a year, but the true pharmacist still loves this branch of his business, and lives in the hope of seeing it extend. We should be sorry to check this ambition; it marks the distinction between the pharmacist and the drug-store man; but we are bound to confess that, from a commercial standpoint, the drug-store man's policy is justifiable. He must be prepared to dispense prescriptions; it is the penalty he has to pay for venturing on the chemist's business. So he provides the necessary conveniences, appliances and men. But he does not look upon the department with any especial affection. He calculates that the man alone costs him 1*s.* an hour, the rent of the space he occupies, and the interest on the outlay he necessitates is at least another 1*s.*, and at modern rates it is doubtful whether those 2*s.* can be got back in the hour. While the dispenser is producing a 6*d.* box of pills, his comrade at the counter is serving six or eight customers, one of whom takes a bottle of liver-syrup on which there is a clear profit of 8*d.* The drug-store man's way of looking at the matter is not altogether high-toned; but it is wise to give it due weight. We may remind chemists that a somewhat similar conclusion was arrived at by a different road in a paper read by Mr. Darton Gibbs, of Birmingham, on which we had occasion to comment in our issue of October 24 last.

WINTER SPECIALITIES.

1. THE COUGH-MIXTURE.

THERE is no more maligned product of pharmacy than the cough-mixture. We admit that it sometimes deserves reprobation, for the ingenuity displayed in getting a little of everything into it, and the success accomplished occasionally in stopping coughs which should be allowed to go free, are reason enough to warrant the ire of those who know better. We submit, however, that medical criticism may go too far sometimes, especially because the experience-proven remedies are safe so long as there is no finality or agreement in therapeutic discoveries. The other day we were reading about some experiments made by an English physiologist on the effect of drugs on the tracheal secretion, and the following is a summary of his results and how he obtained them:—

A window in the trachea of an animal (cat under chloroform, urethane, or morphine) being made, and the surface dried by blotting-paper, drugs were injected into a vein or subcutaneously, and the rate of formation of secretion observed, and compared with that before the administration of the drug. It was found that alkalis increase the secretion in spite of Rossbach's assertion to the contrary; that potassium iodide acts similarly, and emetine only markedly so. Sapouin (senegin) in small doses does not increase secretion; in large doses it diminishes it. Cold and heat applied to the abdomen increase and diminish secretion respectively.

This is one of those nice researches which wicked anti-vivisectionists would put down, and we confess to some sympathy with them because the conclusion that senega does not excite the bronchial secretion is contrary to all clinical experience. We presume that what happens in the trachea will also occur lower down. The results, however, serve to emphasise our point that even doctors are not always physiologically exact in their therapeutic practice. For some reason or other the cough is a symptom which people do not think it necessary to consult a doctor about, so they go to the chemist for a cough-mixture. Perhaps it may be because there are really few coughs in the multitude, cough-remedy advertisements notwithstanding, which lead to anything serious. It is only the painful cough resulting from actual lesion (or skinning) of the air-passages, in which pain is augmented by coughing, that may be very serious indeed, and to distinguish the painful cough from other coughs is no part of the chemist's duty. Nevertheless, a large proportion of cough-mixtures seem to be designed to stop that cough and no other, because few are compounded which do not contain sedatives in more or less heroic doses, and generally with expectorants which are not needed. Probably the reason for so little harm resulting from the use of popular cough-mixtures is that many of them are complex and filled with therapeutic incompatibles. Still there is room for greater simplicity, and we propose by a few examples to show what principles should not be departed from.

Our first example may be the familiar popular household remedy—equal parts of oil of almonds, syrup of squill and syrup of violets. Here the active ingredient is the squill, for the other syrup and the oil have no effect whatever upon the air-passages. The squill is an expectorant. Now, the function of an expectorant is to increase the bronchial secretion, and by the telegraphy of the human system that fact is conveyed to the respiratory centre, whence a message is sent to the muscles of the chest, which close as if they were a bellows, thus creating a cough and a discharge of phlegm. Ipecacuanha, senega, ammonium carbonate and tartar emetic are amongst the remedies which act in this way, and it is obvious that when a person has a copious discharge of soft phlegm he is not at all in need of expectorants. It is here that the traditional cough-mixture is potent for good, because it is so rarely compounded without a sedative. A good example is:—

Vin. ipecacuanhæ	ʒiij.
Chlorodyni	ʒij.
Glycerini	ʒvj.
Aq. ad	℥vj.

M. Sig.: ℥ss. q.q.h.

In this there is a small dose of morphine with the expectorant, and morphine does two things—viz., decreases the secretion, and dulls the respiratory centre, whereby the act of coughing is suppressed. It may be said, therefore, that the above mixture is almost neutral, so far as its action upon the bronchial tubes is concerned; but it eases coughing, gives the medicine-taker a sense of warmth about the chest which he likes, and it does not "upset the stomach." The last point is one which many prescriptions seem eminently calculated to bring about. Take this as an example:—

Oxymel. scillæ	℥ij.
Vin. ipecacuanhæ	℥ss.
Spt. æther. nit.	℥ss.
Syr. pruni Virg.	℥ij.
Tr. sanguinariæ	℥ss.
Inf. senegæ conc.	℥j.
Glycerini	℥j.
Liq. morph. mur.	℥ss.
Syrup. tolutan.	℥xij.

M.

DOSE.—A teaspoonful every four hours.

There is a big waste of material here, and by the time the patient has got rid of his cough, he needs something to cure his indigestion. Polypharmacy is, to some extent, permissible in the cough-mixture, but it should lean towards the combination of flavouring and colouring with one or two active expectorants. The late Sir Robert Christison long ago gave an exellent example of this in his well-known cough-mixture:—

Syrupi scillæ	℥ij.
Aq. menthæ pip.	℥ij.
Tr. opii ammoniat..	℥ss.
Tr. lavandulæ comp.	℥ss.
Syrupi	℥j.

M.

DOSE.—℥ss. three or four times a day.

The dose of squill in this mixture is, *per se*, excessive; but the opium modifies its bronchial action, and the result is a mixture which gives quick relief and comfort. But the objection to this and all other mixtures containing opium is that they are positively harmful in chronic bronchitis, and in many acute cases should be avoided. They do good in the common winter cough. The familiar white cough-mixture, in which tr. camph. co. and tr. tolutan. are combined with a syrupy and mucilaginous basis, is also good, because the amount of opium present is too small to exert any marked physiological action. Bronchitis-mixtures for adults should be as simple as possible. The following is a good one:—

Ammon. carbonat...	ʒj.
Chloral. hydrat.	ʒj.
Tr. card. co...	ʒiij.
Syrupi	ʒiij.
Aq. ad	℥vj.

M.

DOSE.—℥ss. every four hours.

This acts like a charm in many cases solely through the expectorant action of the alkali, the chloral hydrate having a sedative effect without counteracting the expectorant. The mixture gradually undergoes change, some of the chloral hydrate reacting with the alkali and liberating chloroform; but there seems to be a limit to the reaction, and it does not alter the efficacy of the mixture. The tickling cough which is accompanied by little or no secretion, but is spasmodic and sometimes painful, frequently awaking the sufferer from sleep, is now successfully combated by codeine as in the following prescription:—

Codeinæ	gr. ij.
Acid. hydrobrom. dil.	ʒij.
Acid. hydrocyanic dil.	♏ss.
Aq.	℥ss.

Solve et adde—

Syr. limonis ad	℥ij.

M.

DOSE.—A small teaspoonful when the cough is troublesome.

This acts through the respiratory centre chiefly. We have said little in this note regarding children's cough-mixtures, because the little which can be said may be put into one sentence—make the mixtures sweet and as simple as possible, avoiding sedatives. Ipecacuanha is better for children than squill, and they can take a drop of the wine for each year; allow three drops for the first year. It is desirable to make the cough-mixture as nice as possible to the eye and palate; precipitates should be avoided, as a rule, for they rarely contain anything of importance, and make the preparation unsightly.

THE RISE OF CHEMICAL INDUSTRY IN RUSSIA.

WE announced some time ago that the Russian Ministry of Finance had under consideration a project for reducing or abolishing the duties on all drugs and pharmaceutical preparations that are not, or cannot conveniently, be produced in Russia. This scheme, if carried into effect, would give a much-needed stimulus to our export-trade with the empire of the Tsar, which, so far as drugs and chemicals are concerned, has long been languishing. Some portion of the export-trade in crude drugs formerly done between Britain and Russia has been transferred to continental ports, another to the countries of production themselves. Heavy chemicals, such as bleaching-powder and other alkalies, for which Russia used to be one of our best customers, are now made in that country itself, to an ever-increasing extent. The result is seen in our Board of Trade statistics of alkali exports to Russia which show dwindling figures year by year.

We fear that very little trouble is taken in this country to extend, or even to preserve, our Russian business. In Germany, on the other hand, the importance of Russia as a buying-market is quite appreciated. The tariff-war of 1892-93 seriously dislocated the business-relations between the two countries, but since the conclusion of the new Russo-German commercial treaty, German exports to Russia have reached a higher figure than ever before The value of

goods sent from Germany to Russia, converted into millions of pounds, was:—

1889	1890	1891	1892	1893	1894	1895
£	£	£	£	£	£	£
8.70	9.17	7.27	6.49	6.78	8.53	10.39

But there is every reason to believe that, for several years to come, Russian commercial policy will, so far as the existing treaties of commerce permit it, tend towards increased rather than relaxed protection, and in this anticipation foreign capitalists have, for some time, shown a growing inclination to establish factories in Russia. Here again, though there are many British traders, technical managers, and foremen in Russia, the German element predominates. Many years may elapse before Russia can become a leading manufacturing country, but her growth towards industrialism has recently been shown in a remarkable manner at the "All-Russian" Exhibition in Nijni-Novgorod.

This National Exhibition, the fifteenth of its kind, was patronised by the Russian Government and generally supported by the manufacturers. It has attracted little attention abroad, but Pharmacist L. J. Volpian, of St. Petersburg, gives an account of the chemical part of it in the *Pharm. Zeitschrift für Russland* which reveals the extraordinary advance of Russian chemical industry. The imports of nitric and hydrochloric acid into Russia have fallen from 19,000 tons in 1885 to 313 tons in 1894; in other words, the empire is now practically independent of the foreigner for its supply of two of the principal bases of chemical industry. As for that still more important article, sulphuric acid, Russia makes all she requires. No fewer than fifteen sulphuric acid factories were represented at Nijni-Novgorod. As with the acids, so it is with the closely-allied alkali industry. This branch of manufacture struck root in Russia all the quicker because there were no old-established interests with antiquated processes to be got rid of. The semi-foreign manufacturers who established the soda-industry in Russia, the firm of Liubimov-Solvay, maintain two enormous factories in the Governments of Perm and Ekaterinoslav. Two years ago these works produced 45,406 out of the 64,450 tons of soda crystals consumed in the empire. Soda-ash and caustic soda industries have also been successfully established. The caustic soda works are mostly situated in the neighbourhood of Baku, where the product is used in the refining of petroleum-derivatives, and where the abundance of raw material (Mirabolith) enables the makers to turn it out cheaply by the Leblanc process. Along with the sulphuric acid industry there has sprung up in Russia an important manufacture of chromate salts; vitriol; phosphates; lead, zinc, tin, strontium, and copper salts; mineral dyes, &c., all of which find employment in the textile, pottery, and other young industries. Platinum is almost a Russian monopoly, and no one will grudge Russia the new industry of the manufacture of platinum-apparatus represented at her last National Exhibition.

In the manufacture of organic chemicals, and especially in that of pharmaceutical preparations, Russia is still dependent upon the foreigner for nine-tenths of her requirements, although the proportion grows less year by year. But since the All-Russian Exhibition of 1882 two refineries of boracic acid have been established. Chloroform, sulphuric ether, tannin, collodion, chloral hydrate, and tartrate of antimony are also made in the country, though not in sufficient quantity to cover the requirements. And tartaric-acid making has been commenced. It is said that the argol from the Russian wine-growing districts serves for raw material, but the quality is confessedly poor, 10 per cent. of "tartaric acid"—or, say, about 13 per cent. of bitartrate of potash—being the average yield. We wonder that it pays for working.

In medicinal-plant growing the progress of Russia is very great. Six castor-oil factories, all working from Russian-grown seed, were represented at Nijni-Novgorod. Castor-seed growing, like other new agricultural pursuits, is assisted by the Government. An essential-oil industry is also springing up, principally in the southern provinces. But, with few exceptions, it is carried on in a primitive fashion, and yields wretched products. Oils of peppermint, wormwood, caraway, fennel, anise, and pine-needles are manufactured, but only the pine-needle oil is really good. The industry, however, faulty though it be, is making its influence felt upon the seed-market, for the exportation of essential-oil seeds for distillation in Britain, Germany, and elsewhere has lately received a noticeable check. The cultivation of medicinal plants in Southern Russia appears to be in a fairly flourishing state. "Elegant pharmacy," in the Western sense, was also abundantly represented at the exhibition by home-made goods.

Russian woolfat and petroleum jelly (they call them "Lanolin" and "Vaseline" in Russia) are poor in quality. Benzine-distilling, on the other hand, is a flourishing business. This is not surprising in a country which, within the past fifteen years, has developed the second largest petroleum-industry in the world. From 31,500 gallons in 1882, the Russian benzine output had risen to nearly 1,570,000 gallons in 1894. The measurements given of the vast petroleum-works that have grown up in Transcaspia exceed those of Leviathan and King Og of Bashan. The firm of Nobel alone owns 188 miles of petroleum pipe-lines. It has a fleet that could knock spots out of Xerxes', and owns 1.157 tank-waggons for the conveyance of its products by rail.

The industry of the dry-distillation of wood in Russia is only just beginning. We have all heard of the reckless destruction of forests that has been carried on in that country, as in almost all others which once had great sylvan wealth. But in Northern Russia, away from the railways, there are still many thousands of square miles under wood, and a smaller area covers portions of the Caucasus. Yet up to the present only ½ per cent. of all the rosin, and but a slightly larger proportion of the turpentine, used in Russia has been of Russian manufacture. It has generally been assumed that the Russian fir (*Pinus sylvestris*) could not be made to yield turpentine and rosin of equal quality or abundance to the French or American pines. The Russian Government, out of its great bounty, gave Professor Flaziwski, of Kasan, a slice of Crown forest to experiment on, and the Professor reports that Russian turpentine, if collected by the French process, does not differ, chemically or physically, from the French, except that it is dextrogyre to the same degree that the French is laevogyre. Moreover, the Professor has obtained a balsam from *Abies Sibirica* that will advantageously replace Canada balsam for technical and microscopic purposes. The day of the chemical exploitation of the Russian forests is therefore dawning, and within a few years the country of the Tsar may export, instead of buy from abroad, acetic acid, wood-naphtha, acetone, wood-vinegar, and acetate of lime. The importance of the Russian liquorice-juice and liquorice-root industry (*Glycyrrhiza echinata* yields these products) is generally known.

The value of the output of chemicals of all kinds in Russia, according to the statistics of the Ministry of Trade and Industry (which need not be implicitly believed) was 15,437,000r. in 1880, and 29 822 000r. in 1890. The importation of chemical products into the country has declined from 19,262,000r.'s-worth in 1880 to 14,402,000r.'s-worth in 1890. This is the nation with which we have already to compete in Central Asia and Northern Persia, and which will ere long be our commercial rival in the Far East.

THE MICROSCOPE-EYE.

The *Sheffield Daily Telegraph* is too clever for us, perhaps because its gifted proprietor is an erstwhile druggist. Writing about diphtheria the *Telegraph* solemnly avers that "a doctor, who is an enthusiast on the subject, tells any of his patients who doubt the remedy that he has put antitoxin into a glass jar well filled with the diphtheria microbe, and has watched it literally destroy the poison." Such an optic nerve that doctor has!

SCOTTISH MEDICINE.

Scotland is happy now, for she has got a medical journal all to herself. She has had journals of the kind before, but they were local affairs—with an imperial circulation, say the old ones. In the *Scottish Medical and Surgical Journal* there is, however, real merit. The first number contains several really useful contributions by Scotch medical practitioners, and the whole journal has the flavour of Scotch practice about it, the reports of societies being particularly good. The journal is edited by Dr. William Russell, of the Edinburgh Royal Infirmary, under the direction of eleven of the leading physicians and surgeons in Aberdeen, Dundee, Edinburgh, and Glasgow. Mr. William F. Clay, 18 Teviot Place, Edinburgh, is publisher for the committee. The journal is well printed, and somewhat favours the *Practitioner* style in make-up. The annual subscription is a guinea.

FAILURES IN 1896.

We are favoured with the statistics of failures annually compiled by Mr. Richard Seyd, F.S.S., and find from them that the inprovement which began in 1894 has still further developed. In 1893, 10,658 failures were recorded in England and Wales, including bankruptcies and deeds of arrangement. The number fell to 10.507, in 1894; to 9,458, in 1895, and to 8,843 in 1896. The drug-trade contributed 68 to the total in 1895, and exactly the same number in 1896. In 1895 these were divided into 28 bankruptcies, and 40 deeds, while in 1897, there were 32 bankruptcies and 36 deeds. Surgeons, physicians, and dentists scored 45 failures among them in 1896 against only 35 in 1895. Aërated-water makers were 26 in 1896, against 32 in 1895. Grocers made a very near match between the two years, the number recorded being 874 in 1895, and 877 in 1896. Farmers are being rapidly reduced to poverty, fewer being left each year to keep up the average. In 1896 the record was 520 against 604 in 1895.

MEDICAL HONOURS.

Sir Joseph Lister has been made a peer, and Dr. Richard Douglas Powell, the senior physician-extraordinary in the Queen's Household, has been made a baronet. It is a popular theory, or at least a newspaper theory, that the whole profession rejoices when one of its members is honoured in this way. Indeed, a medical journal declares that the announcement of Sir Joseph Lister's peerage "will excite a thrill of enthusiasm throughout the length and breadth of the medical profession." As a matter of fact, it is probable that the strongest feeling aroused by the conferment of titles is one of jealousy. Sir Joseph Lister, who is in his 70th year, has won great renown as a surgeon, especially in connection with his services to hygienic and antiseptic surgery. He was born at Upton in Essex, and last year held the two offices of President of the Royal Society and President of the British Association for the Advancement of Science. He has lately retired from practice, and it is most likely that the peerage is intended to honour science and the Royal Society rather than medicine. It has been prominently stated that Sir Joseph Lister is the first medical man to be called to the House of Lords, in curious forgetfulness of Lord Playfair's professional eminence.

HOT DRINKS.

Mr. Albert Smith, analytical chemist, the Chemical Laboratory, 39 Sotheby Road, Highbury, N., has written to the *Islington Gazette* about hot drinks sold by Italians on the streets of London. He has

managed to get two samples. One of these consisted of acetate of amyl, or fusel oil, distilled with sulphuric acid, or oil of vitriol, acetate of potash, and bichromate of potash, all of which are rank poisons, and will produce headache, drowsiness, sickness, and stupor in children. The bright-red colour is produced from aniline or coal tar by the aid of arsenic. The other drink was gingerade, and was composed of tincture of capsicum, there being no ginger in it at all. The excuse of ignorance may tell somewhat in favour of these Italians, who in some cases may not be aware of the poisonous nature of articles which they daily use, knowing them only by their common or popular names.

This statement is not a fair one, and we cannot conceive what purpose Mr. Smith has to serve by so representing the facts as to make it appear that the drinks are composed of "rank poisons." No one with chemical knowledge can misunderstand what he says, but when he writes about rank poisons and omits to tell his readers that these poisons are completely eliminated in the manufacture of amyl acetate and aniline colours, his letter becomes sadly misleading.

ANÆSTHETIC FATALITIES.

The *Medical Times* states that sixty-three deaths under [why not "from"?] anæsthetics occurred in the United Kingdom during 1896, being an increase of three deaths over the number reported in 1895. In twenty-seven cases fatal symptoms of syncope appeared a few minutes after commencing inhalation: in twenty-four cases just at the beginning of or during the operation; in seven cases directly after the completion of the operation; and in five cases no particulars are given. One death is reported in Ireland, two in Scotland and sixty in England. Of the last fourteen were in the Metropolis, and forty-six in English provincial towns. The *Medical Times* says: "This great mortality points to the necessity of a radical change in the mode of administering anæsthetics." We should think it does. The death-rate in Ireland is one to 4½ millions of inhabitants, in Scotland double that rate, and in England and Wales almost ten times the rate. Fifty-five of the deaths were due to chloroform or mixtures containing it, six to ether and one to nitrous oxide. We wonder how many of these deaths were due simply to want of air? Mr. Krohne, of Krohne & Sesemann, has been advocating for years a system of anæsthetics-administration which ensures that patients breathe a definite mixture of the anæsthetic vapour and air, with the result that syncope is impossible. It has long been alleged that the system of administering chloroform in England is unsound, and the above figures respecting the excessive mortality in England are sufficient proof of the need for reform.

STERILISED MILK AND SCURVY.

Mr. J. Kingston Barton, M.R.C.P., writes an alarming note to the *British Medical Journal* regarding sterilised milk. He says that completely sterilised milk, as sold in hermetically sealed bottles, administered without fresh food, will sooner or later produce scurvy. He gives no support to this positive statement further than that he has "devoted special attention to this matter during the past two years," but we gather from his note that it is the want of fresh food that is the cause of the scurvy, and that the complete sterilisation has an influence also, for he recommends one meal of fresh whey per day to those infants who cannot take fresh vegetables, &c.; and "comparatively sterilised" milk made thus:—

If milk is placed in a china vessel which stands in another vessel containing cold water, and this is brought to

the boiling-point, then the milk will not itself boil within the first fifteen minutes after the water boils. This heated milk does not lose its antiscorbutic properties for at least twelve hours.

As already stated, Mr. Barton's statements are entirely uncorroborated, and, in a measure, uncalled for, as there has not been the slightest breath of suspicion that children fed on sterilised milk are less healthy than others.

TRADE-MARKS IN JAPAN.

The British Minister at Tokio, in a telegram to the Foreign Office, dated December 29, states that it has been agreed that Article 17 of the treaty between Germany and Japan shall be brought into operation as regards British subjects on January 4. Mr. Evans-Jackson, manager of the Trade-marks Defence Union, writes, concerning this, as follows:—"It is scarcely necessary to point out to British manufacturers that no time should be lost in availing themselves of the new regulations"; and Mr. J. Seymour Salaman, of 65 Chancery Lane, writes to us on January 6, pointing out that trade-marks can now be registered in Japan, but adding that the procedure is rather peculiar, and it will require great care to see that the forms are in proper order. He is in possession of full information on the subject, and will be glad to impart that information to any persons desirous of registering in Japan.

Legal Reports.

COUNTY COURT CASES.

DOCTOR AND DRUG-MERCHANTS.

IN the City of London Court, on Friday, before Mr. Commissioner Kerr, Messrs. Thomas Hodgkinson, Prestons & King, wholesale drug-merchants, 81 Bishopsgate Street Without, E.C., applied to enforce payment of the sum of 18*l.* due to them for drugs supplied to the defendant, Dr. J. H. McMullen, 286 Goswell road. Dr. McMullen admitted that he was carrying on two businesses, but he said he did not make more than 150*l.* a year. That was his average income. He would pay 15*s.* per month. Mr. Commissioner Kerr said he could not understand why the plaintiffs parted with their drugs without the money. He made an order for the payment of 15*s.* per month.

HIS WIFE'S DRUGS.

AT the sitting of the Sheerness County Court, on Tuesday before Judge W. L. Selfe, Tribe & Lamb, chemists and druggists, sued a chief petty officer in the Royal Navy, named Marsh, for 6*l.* 17*s.* 2*d.* for drugs, pills, &c., supplied to his wife. The Judge: Were these pills for the purging of herself and family? The plaintiffs' representative replied in the the negative, and said that at the time Mrs. Marsh kept a shop in Hope Street, and sold the articles again. Defendant pleaded that he was at sea at the time, and knew nothing about the transaction. The case was adjourned for the wife's name to be added to the summons.

COMMISSIONER KERR AND THE ALTERATIONS OF THE LAW.

MR. COMMISSIONER KERR, on Friday, in the City of London Court, heard a case in which the Continental Bottle Company, Billiter Square Buildings, E.C., applied to have Dr. George Hunstone, Bath Lodge Road, Regent's Park, committed to Holloway Gaol for the nonpayment of the sum of 3*l.* due for medicine-bottles supplied. Mr. Jessiman, plaintiffs' representative, said defendant recently told him he had the money to pay with, but he wanted it to pay rates, taxes, &c., with. His business as a surgeon, he said, was a good one, and was increasing. He was expecting 100*l.* or more at the beginning of the present month. Mr. Commissioner Kerr: And you believed that? Mr. Jessiman: I took the gentleman's statement. Mr. Commissioner Kerr: When you have lived longer in this world you will believe nothing that anybody tells you. That is my advice to everybody. Give me evidence of the man's means. Have you tried to take his goods in execution? Mr. Jessiman replied that the landlord was paid out recently by the defendant's sister, who lived on the premises. Mr. Commissioner Kerr said he could not act upon that. He must have positive evidence of the defendant's means. Mr. Jessiman: What, in the absence of the defendant? Mr. Commissioner Kerr: That is the law now. Formerly it was not so. If the defendant was absent he was committed because he was absent, because it was his business to come and show that he had no means. The law is altered. The fact is, the Legislature is busy altering the law in favour of the debtors and not of the creditors. Mr. Jessiman: He paid one instalment into Court. Mr. Commissioner Kerr: That shows he is willing to pay the money. You do not see the effect of what you say. So perhaps it is as well that I allow you to go on talking. Mr. Jessiman made no reply, and Mr. Commissioner Kerr said he could make no order.

REVENUE CASES.

CLEANED METHYLATED SPIRIT FOR WHISKY.

AT the Darwen Borough Police Court on December 31st, Thomas Parkinson, an old man from Blackburn, was charged on remand with hawking methylated spirit. Mr. Dennis, barrister, prosecuted on behalf of the Inland Revenue Office, and stated that Parkinson was charged under four informations. He pointed out that in consequence of methylated spirit being duty free it was necessary to employ stringent regulations to prevent it being put on the market as a beverage. Parkinson had been in the habit of procuring the methylated spirit from various chemists in Blackburn, and by means of filtration through charcoal, ridding it of its nauseous taste and smell. The stuff was very deleterious, however, and several of the persons who partook of it were rendered ill in consequence. Several officers of the Indian Revenue gave evidence, as did many persons who purchased the mixture from Parkinson. The latter when arrested said he had sold the stuff for outward purposes only, and first got the idea from a newspaper. Several convictions against him for like offences were proved, and he was fined 25*l.* and costs in two cases, or in default six months' imprisonment, and in the other two cases fines of 1*l.* and costs were imposed.

TEETOTAL DRINKS AT SHEFFIELD.

THE Sheffield Magistrates had before them on Tuesday last some peculiar samples of teetotal drinks. Two shopkeepers, named Geo. Hill and Mary E. Bunting, were charged with selling "beer" without a licence. The "beer" complained of was herb beer and ginger beer. Mr. Sier, supervisor of excise for the Sheffield district, stated that the Act described beer as "any liquor which is made or sold as a description of beer, or substitute of beer, and which on analysis is found to contain more than 2 per cent. of proof spirit." Mr. Mullholland proved the purchase of the beers. Mr. Burge, one of the analysts at Somerset House, stated that Mr. Hill's herb beer had a saccharine value of 1,034·28, and contained 4·3 per cent. of proof spirit, while the ginger beer was 1,029·22 value, and contained 4 per cent. of proof spirit.

Mrs. Hill said the ginger beer was made from ginger and sugar, and produced a bottle of essence which was used for the herb beer. In winter, she said, she added more sugar to make it keep.

In Bunting's case, Mr. Burge said the herb beer had a saccharine value of 1,033·99 and contained 6·6 per cent. The alcoholic strength of the samples was in excess of that of a large amount of mild beer sold in the Midlands, and fully as strong as the ordinary mild beer sold in London. It was quite as intoxicating. In some of the lager beers the percentage was as low as 2. In a nice light Burton bitter he recently analysed he only found 4·7 per cent. Brewers' beer was a much better drink than this beer complained of, as it was much better made.

Defendant explained that at first she did not put so much sugar in her beer, but her customers complained and she gradually increased the quantity.

The authorities did not press for a heavy penalty, and each defendant was fined 10*s.* including costs.

SALE OF FOOD AND DRUGS ACT.

SPT. ÆTHER. NIT.

MR. LEMON, chemist, of High Street, Whitechapel, was summoned at the Worship Street Police Court, on January 4, for selling nitrous ether deficient by 26 per cent. of ethyl nitrite. The defendant pleaded guilty, and in explanation said that nitrous ether—well known by its common name of "sweet nitre"—was a volatile spirit, which depreciated every time the stopper was taken from the bottle, and also by long keeping. He had had the spirit, from which the inspector was supplied, since April last, and all the summer there was not much sale for it. Mr. Corser: Because people don't take cold so freely. The Defendant: They take sweet nitre for colds, and gruel. Mr. Corser: And when they do take it, if it is depreciated in this way, it does not do them much good. The defendant admitted that, but pointed out that there was no adulteration. He hoped that that would be borne in mind. Mr. Corser said there was no suggestion of adulteration, and under the circumstances he thought that if the defendant paid the costs—12*s.* 6*d.*—the summons might be withdrawn. The defendant at once paid the costs.

"ARSENICAL" SOAP.

WE are informed that the county authorities intend to appeal against the decision of the Magistrates in the summons against Mr. H. L. Carter, of the Broadway, for selling as "arsenical" soap an article containing no arsenic, which came before the Court, on Wednesday last week, and was dismissed. Notices to state a case have already been served, and the appeal will probably be heard some time in March. —*Wimbledon Post.* [This is the case in which the Magistrates said that if, as the prosecution alleged, there was no arsenic present, the soap could not be a drug, and dismissed the summons.]

AT the County Petty Sessions, Kingston-on-Thames, on Thursday, January 7, before the County Magistrates, Charles Lowe & Co., chemists, Surbiton, were summoned for selling a certain drug—namely, arsenical soap—which was not of the nature, substance, and quality demanded by Mr. R. A. Houghton, Inspector under the Sale of Food and Drugs Act for the district. Mr. J. H. Gould prosecuted on behalf of the Surrey County Council.

The sale of the soap on December 7, 1896, having been admitted, Mr. Harvey, manager for Messrs. Lowe & Co., stated they sold it in exactly the same condition as they received it. They were merely distributing agents. He thought the manufacturers of the soap should be the persons responsible for the deficiency. He had been informed that arsenic was put in this make of soap; according to the analyst's report it was not present in this particular sample. This, he thought, might perhaps be due to its not having been thoroughly mixed in the manufacture.

Mr. Houghton stated that of four different samples he had purchased of this make no arsenic had been found in any.

Mr. Harvey said he would leave the case entirely in the hands of the Bench.

The Chairman, after consultation with his colleagues, decided that the case had been proved by the prosecution, and fined defendant 10*s.*, with 13*s.* 6*d.* costs and 10*s.* 6*d.* analyst's fee.

TINCT. RHEI.

AT the Northop Petty Sessions, on December 31, Edward Chambers, grocer, was summoned for selling tincture of rhubarb, to which water had been added, and from which saffron was entirely wanting. The defendant said he purchased the tincture at Mold, but had no guarantee as to its quality. The Bench inflicted a fine of 18*s.* 9*d.*, including costs.

THE PORTEOUS VEGETABLE OINTMENT CASE.

THIS case, in which it may be remembered that Lord Kincairney had refused interdict to the Porteous Vegetable Ointment Company against Alexander Porteous of Glasgow, who claimed the right to make and sell the ointment, has been taken to the Court of Session, and on Wednesday last the Lord Justice Clerk and Lord Young confirmed the judgment of the Outer House, and gave costs to the defender.

IRISH PHARMACY ACT.

SALE OF ETHER.

AT the Moneymore Petty Sessions, on Tuesday, before Captain Welch, R.M., and the local justices, Mary Brennan, of Cedaggon, was summoned by Sergeant Bell for keeping open shop for the sale of ether. The defendant did not appear, and was unrepresented. The case had been adjourned from last court-day for the attendance of defendant's daughter as a witness. Sergeant Bell stated that there have been serious complaints made about the sale of ether in this place. Defendant was fined 5*l.* and costs.

The P.A.T.A. Campaign.

A LARGELY-ATTENDED MEETING was held at Liverpool, under the auspices of the P.A.T.A., on Thursday afternoon. Mr. A. C. Abraham was elected to the chair. The Secretary read several letters expressing sympathy with the movement, including one from the Patent-medicine Vendors' Defence Association expressing doubt as to the success of the scheme. The Chairman said that the question was purely a commercial one. Therefore it should be treated on different lines to scientific matters, and he hoped that a practical decision would be come to. Mr. Glyn-Jones said he agreed that this was essentially a trade question. That was demonstrated by this excellent meeting, which proved that chemists were alive to what affected their trade. This plan of campaign of the P.A.T.A. was well known to all of them, but an essential point to remember was that the organisation had originated with the retailers. He contended that manufacturers, wholesale houses, and retailers had all to gain and nothing to lose by such a combination. As to the attitude of the Patent-medicine Vendors' Defence Association, that scheme was not yet complete, and isolated exceptions of the minimum price being realised were possible, but if the trade would report such cases perfection could soon be reached. He introduced one or two cases where Geraudel's pastilles could be purchased in Liverpool under Association price, but that would soon be stopped. As to the wholesale houses, they had the bulk of them in London. Messrs. Evans, Sons & Co. had written to say that they would be represented at the meeting, but entirely in a neutral capacity, as they considered that this was a meeting which concerned the retail trade particularly, and should be left in their hands. Mr. Jones then reviewed the objections to the work of the Association, saying that it was not possible to get rid of the proprietary trade, nor was it desirable. As to the campaign-prospects, Messrs. Boot and Day were attending to this for them. He concluded with a strong appeal to those who, by their position, were personally not greatly interested to support their weaker brethren.

The Chairman said he would like to know how this scheme would be likely to succeed. In America others of like nature have failed. Undoubtedly the advantages to chemists would be great if carried out; but could it be successfully worked? He would like to see how it was to be done. For example, how were reports to be obtained?—as it was most difficult to get chemists to report even existing infractions of the law. He would also like to know what responsibility wholesale houses would incur if they joined the P.A.T.A. Could the P.A.T.A. guarantee that the minimum prices would be adhered to? He thought that the attitude taken up by Evans, Sons & Co. was a reasonable one. It expressed his own views exactly.

Dr. Symes said that there was always a suspicion of combinations, but all great work was brought about by combination, and only by complete combination were great results to be obtained. The test for a combination was its motive, and in this case the motive

was good—namely, removal of an evil. If other traders were content to sell patents at cost, well and good; but to do so as a bait for business, and then to say that rival traders were making exorbitant profits was simply a lie. (Applause.) If this Association could strike at the root of this dishonest system of trade, it would have his support. He moved a resolution expressing approval of the P.A.T.A. aims and objects, and urging upon all proprietors the advisability of adding their articles to the protected list. Mr. J. Smith seconded. He spoke appreciatively of the work of Mr. Glyn-Jones, whose ability, zeal, and energy had been conspicuous. He was anxious to retain the public as customers of chemists for drugs, and, therefore, thought pharmacists would be unwise to relinquish the patent trade. Manufacturers should join because the stores could not advertise the articles so well as the retailers.

Mr. T. J. Wokes supported the resolution, and gave personal experience of the action of cutters in a large way in London, whose trade in patents was done at a loss, but paid them as an advertisement.

Mr. J. Hocken wanted to know if the face-value of an article could not be insisted upon. Recent advances in prices by makers still left a small margin for retailers.

Mr. W. A. Grace advocated an appeal to the trade generally to say whether they supported the action of the P.A.T.A. or not. Mr. Breeze wanted to know how the wholesale houses could be checked in supplying. Mr. Glyn-Jones, in replying, said that the schemes in America had failed because the retailer had been left out, and anti-cutting schemes which did not provide for retailers' profit must collapse. As to prospects of success, their stronghold was that they were right. As to wholesale houses, the check on them was very simple, and worked well. Maintenance of face-value was an ideal towards which they were working. Failing this, they wanted a minimum cutting-price, to be advertised. He would impress on the meeting that the patent medicine-taking public were also a drug-taking public, and must be catered for in simple drugs. Had such an Association been working with vigour the recent affront to the trade by the Vogeler Company would not have been possible, and that Company would soon learn that the P.A.T.A. were a powerful body.

The resolution was then put, and carried unanimously. A committee of the Liverpool Chemists' Association was then formed to watch the interests of the P.A.T.A. About forty present joined the Association.

Wills of Deceased Chemists.

The will and codicil of Mr. James Stevens, chemist and druggist, High Street, Strood, who died on October 18, have been proved by Mrs. Stevens, the widow, Mr. William Stevens, 23 New Road, Rochester, retired chemist, a brother, and Mr. G. R. Viney, 35 Railway Street, Chatham, by whom the testator's personalty is sworn at 7,708*l.* 15*s.* gross, and 7,369*l.* 18*s.* 11*d.* net.

The will of Mr. Thomas J. Smith, wholesale druggist, of Kingston-on-Hull, and also of Wilton Terrace, Hornsea, who died on October 3 last, has been proved in London by Mr. George F. Smith, of Shortlands Grove, Shortlands, Kent, the brother; Miss Amelia Jane Smith, the sister and executrix named in the will, having renounced probate. The testator's personalty amounts to 6,097*l.* 16*s.* 4*d.* gross, 4,830*l.* 18*s.* 3*d.* net.

The will of Mr. Harry Alma Thomas, pharmaceutical chemist, 78 Gracechurch Street, formerly of Bellari, Hatherley Road, Sidcup, who died on November 7 at his residence, 44 Avenue Road, Regent's Park, has been proved by Mrs. Hettie Thomas, the widow; Mr. Edwin Curt, 73 Arodene Road, Brixton, and Mr. Arthur Slator, 70 Great St. Helen's, the executors. The personalty amounts to 41,253*l.* 17*s.* gross, and 40,475*l.* 11*s.* net.

PARKE'S DRUG-STORES (LIMITED).—Under the ominous title of "Promise and Performance," *Money*, of January 6, publishes a severe criticism of this enterprise.

London Drug Statistics.

THE following statistics relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses in the course of the years 1896 and 1895, and to the stocks on December 31 of each year. The statistics are supplied by the warehouses in question, and their accuracy cannot be guaranteed. It should also be noted that certain warehouses refuse to supply returns.

Article	Stocks		Imported		Delivered	
	1896	1895	1896	1895	1896	1895
Aloes.....cs, &c.	4,041	4,891	2,807	2,473	3,757	2,486
„ ..... gounds	1,956	2,699	—	139	743	663
Anise, Star .....cs	124	284	3	41	150	233
Arrowroot .... brls	11,745	13,649	15,825	21,067	17,729	17,438
„ bxs & tns	2,523	2,059	1,788	2,465	1,324	2,772
Balsams (medicinal) cks, &c.	808	1,364	828	1,833	1,383	1,625
Borax ..... pkgs	10	41	—	51	31	10
Calumba ..... bgs	11	1,222	36	1,233	1,145	1,053
Camphor(crude)pkgs	11,932	16,273	6,473	19,711	10,814	7,740
Cardamoms ..cs, &c	444	978	2,112	3,263	2,644	3,017
Cinchona-bark :—						
S. American....cs	56	58	—	14	2	20
„ bls, &c.	13,824	17,249	2,768	5,384	6,193	7,923
E. I., Ceylon, } cs	308	270	293	232	255	153
and Java } bls	8,002	9,873	16,629	12,259	17,798	14,523
Total.....	22,190	27,450	19,690	17,889	24,248	22,629
Cochineal ..... bgs	2,702	1,739	3,275	2,457	2,312	2,651
Cocculus indic... „	72	92	147	165	166	267
Cream of tartar cks	5	5	9	22	9	17
Cubebs ..... bgs	470	396	296	520	222	510
Cutch ..... tons	1,826	1,715	1,873	1,305	1,758	2,373
Dragon's blood .. cs	59	179	142	298	262	306
Galls—						
China & Japan cs	1,083	507	1,981	1,469	1,405	1,454
Trkey.& Persn. bgs	5,517	4,957	7,495	5,359	6,935	7,677
Gambier ..... tons	1,067	759	5,660	6,207	5,333	5,939
Gums—						
Ammoniacum pkgs	39	77	19	173	63	191
Animi & copal „	14,942	8,474	32,348	22,534	26,123	23,962
Acacia ..... „	12,996	10,924	24,455	22,266	22,425	21,788
Asafœtida .. „	261	763	736	1,853	1,238	1,263
Benzoin .... „	3,403	1,508	5,472	3,344	3,577	3,562
Damar ..... „	3,770	2,093	8,539	8,710	6,821	9,649
Galbanum .. „	1	2	—	—	1	9
Gamboge .... „	192	159	408	250	375	299
Guaiacum .. „	50	57	95	106	102	165
Kino ..... „	25	14	25	21	14	22
Kowrie tons (net)	1,055	1,443	2,948	2,852	3,331	3,526
Mastich ....pkgs	12	20	34	10	42	11
Myrrh ..... „	574	555	498	559	463	534
Olibanum .. „	2,406	2,056	5,954	5,989	5,605	6,854
Sandarach .. „	317	262	1,156	830	1,101	1,237
Tragacanth.. „	4,047	1,979	8,149	6,407	6,081	8,175
Ipecacuanha—						
Rio ..... bls	447	584	569	758	706	945
Other kinds pkgs	21	44	151	164	174	212
Jalap ..... bls	304	252	381	376	329	313
Lac dye ..... chts	2,705	2,794	—	—	128	118
Nitrate of soda tons	679	1,974	14,582	16,509	15,877	15,729
Nux vomica .. pkgs	518	1,076	639	2,503	1,214	2,305
Oils—						
Anise.....cs	45	130	98	429	183	355
Cassia ... . „	20	30	53	55	64	157
Castor.....cks	212	87	1,306	696	1,175	654
„ ..... cs	815	1,095	1,607	1,864	1,858	2,469
Cocoa-nut .. tons	346	742	1,921	3,524	2,320	3,327
Olive .... cks, &c.	1,161	435	2,969	1,573	2,257	2,222
Palm.....tons	15	9	135	77	127	70
Rhubarb .....chts	461	923	796	1,579	1,258	1,829
Safflower .. bls, &c.	148	79	214	17	129	85
Saltpetre ..... tons	1,873	590	6,543	3,181	5,261	3,012
Sarsaparilla .... bls	263	266	1,014	1,147	1,017	1,223
Senna .....bls, &c.	3,025	2,598	6,529	6,094	6,101	5,854
Shellac—						
Button .....cs	5,919	6,128	6,533	12,921	9,742	10,784
Garnet ..... „	4,247	5,883	6,392	13,727	8,028	9,638
Orange ..... „	25,513	13,688	50,179	28,714	38,354	27,932
Total.....	35,679	25,699	66,104	55,362	56,124	48,354
Sticklac ..... cs	3,019	472	6,706	3,494	4,167	3,397
Sulph. of quinine lbs	87,954	123,277	14,565	11,516	49,887	60,303
Turmeric—						
Bengal .....tons	525	753	93	786	326	393
Madras, Cochin, &c..... „	382	633	129	877	383	7[illegible]1
Total.... „	907	1,386	222	1,603	709	1,099
Vermilion..chts, &c.	7	16	17	13	26	13
Wax—						
(Bees')..bls & srns	410	1,201	1,909	4,129	2,622	3,304
„ cks & cs	972	1,035	2,895	4,347	2,916	4,002
(Japan)....cs, &c	154	477	282	474	599	1,244

Trade Reports.

42 CANNON STREET, E.C., *January* 7.

THE markets have scarcely reopened since the holidays, and there are few large price alterations to report in chemicals. Citric and tartaric acids maintain their prices, while cream of tartar is easier for crystals. Sulphate of copper very firmly held, and benzol dearer. Arsenic remains very firm. In fine chemicals we have to report an entirely neglected market for quinine. Camphor has undergone no further change. Pilocarpine is quoted lower by the manufacturers. The first drug-auctions of the year, which were held to-day, were very lengthy. There were no fewer than eighteen catalogues, comprising altogether 1,797 lots, not including the vanilla, which will be sold to-morrow. The proportion of goods disposed of at the auctions was small—viz., about 30 per cent., or a total of 536 lots. There was very little animation at the sales, and most of the price alterations were in a downward direction. Cape aloes is 1*s.* to 2*s.* lower, while good Socotrine is held for high prices, and Curaçao is unchanged. Araroba is in fairly plentiful supply. Buchu a trifle firmer. Copaiba balsam might be had a little below the recent high quotations, while Tolu and Peru are neglected. Benzoin is dull of sale for all varieties; good Sumatra sold at fairly steady rates; common kinds are neglected. There was a decline of about 5*s.* per cwt. in cubebs, but calumba-root is scarce and firmly held. Turkey colocynth slightly easier. Cannabis Indica held for firm prices. Crude camphor is without business and tending lower, and there was a heavy decline in cardamoms, which was especially marked in fine qualities and in the wild variety. Gum acacia sold at fair prices for good sorts. Spanish ergot of rye is steady, and high rates were paid for wild red South American cinchona-bark. Honey steady. Guaiacum unchanged. Guarana decidedly easier. Asafœtida almost all bought in, but firmly held. Fine dragons'-blood commands high prices. Ipecacuanha is firmly held, but nothing was sold to-day. Kamala, kino, and kola tending easier. Myrrh remains cheap, and menthol is a trifle easier, but cod-liver oil is decidedly lower. In essential oils there are few alterations, the principal change being a decline in star-anise oil, while acacia and citronella are neglected, and lower prices are asked for Japanese and H.G.H. peppermint. Orris-root quiet. There is no change in opium. A small quantity of rhubarb sold cheaply. Ordinary Tinevelly senna is lower, while fine qualities are scarce and dear. Sarsaparilla shows no change. Beeswax is firmly held for all varieties, but in Japan wax there was a rather heavy decline. Ceresin wax is said to be tending higher, and good vanilla is scarce and firmly held. Shellac closes somewhat steadier. At the first spice sales of the year, held yesterday, a very dull tone prevailed, and only a small quantity of the goods offered found buyers.

Alcohol in Manufactures.

The Committee appointed by the Society of Chemical Industry, the Drug Club, and the Chamber of Commerce, to inquire into the feasibility of extending the drawback regulations on spirit used in manufacturing in this country met for the first time at the Chamber of Commerce offices on Tuesday. Messrs. David Howard and William Thorpe represented the Society of Chemical Industry; Messrs. R. B. Barron, and E. A. Webb, the Drug Club; and Messrs. Charles Umney and Thomas Tyrer, the Chamber of Commerce. The last-named gentleman was elected to the chair. The meeting was chiefly occupied in the comparison of the regulations affecting the use of duty-free spirit in manufacturing in various industrial countries. Several other meetings will have to be held before the Committee will be in a position to make representations to the Inland Revenue authorities.

New York Cablegram.

Our New York correspondent wires, on Thursday evening, that the price of wood-alcohol has been advanced to 10c. per gallon. There has been a decline of 1c. per lb. in double-distilled glycerine. Serpentaria-root is scarce, at 22c., and podophyllin-root also continues in very small supply, up to 15c. per lb. being asked for good quality. Golden-seal is held for 27c. per lb. There has been a further advance in all varieties of balsam copaiba, ranging from 2c. to 5c. per lb. Peru balsam quoted at $1.75. Quillaia-bark is plentiful.

Hamburg Telegram.

Our Hamburg correspondent wires on Thursday afternoon that business is still very dull. For refined *Camphor* 2.65m. per kilo would be accepted, which is 0.20m. easier. *Castor oil* is again cheaper, at 56m. per 100 kilos. for best East Indian. *Turpentine* slow of sale at lower prices—namely, 41.50m. for good American.

ACID (GALLIC) is held for somewhat higher prices by certain manufacturers, 1-cwt. lots of pure light being quoted at 2*s.* 1*d.* per lb. Lower quotations, on the other hand, are made for *Pyrogallic*, which offers at 7*s.* per lb. in 7-lb. tins, and at 11*s.* in 1-oz. bottles.

ACID (TARTARIC).—Market quiet, at 12½*d.* per lb. for B.P. quality from the manufacturers. Foreign brands offer at 11¾*d.* per lb. on the spot. We understand that the Fabbrica Lombarda of Milan have just finished the installation of a plant for the manufacture of tartaric acid on a large scale. This is the second factory of the kind in Italy.

ALOES.—Good *Socotrine* aloes remains extremely scarce, and for a small parcel shown to-day 100*s.* was named as the price for the best lots. There has been an arrival of 10 packages recently. *Cape* aloes in fairly good supply. Sixty-eight boxes were offered to-day, of which 57 sold at a decline of about 1*s.* to 1*s.* 6*d.* per lb., good hard bright realising only 19*s.*, good seconds 18*s.* 6*d.*, and ordinary, partly drossy, from 17*s.* 6*d.* down to 16*s.* per cwt. *Curaçao* aloes was represented by 290 boxes, of which 61 sold at fairly steady rates—23*s.* to 25*s.* per cwt. for fair brown livery, 20*s.* to 21*s.* 6*d.* for partly capey, and 13*s.* for ordinary dull quality.

ARAROBA still continues to arrive. There were 21 packages in the *Magdalena* from Bahia. At auction a parcel of 9 cases, imported some time ago, was offered; it consisted partly of dark and partly of fair greyish yellow quality. The lot is said to have a fair chrysarobin content; but there were no bids for it to-day, and it was bought in at 3*s.* 6*d.* per lb.

BALSAMS.—There are sellers of genuine *Maranham copaiba* at several pence below the quotations recently given. In Liverpool we hear 2*s.* 2*d.* per lb. has been accepted. A parcel of 8 casks of this variety was offered at auction, and bought in at 2*s.* 6*d.* per lb. nominally. Another lot of 8 cases thin balsam, "filtered abroad," and ranging in colour from yellow to dark red, was bought in at the same figure. Half-a-crown a pound is also the quotation for good genuine *Balsam Tolu*. Eleven packages of this drug were offered at auction, and bought in. *Peru balsam* neglected; 3 cases offered at auction were bought in at 7*s.* 6*d.* per lb.

BENZOIN.—*Siam* gum was represented at to-day's auctions by 30 packages. Only 3 of these sold, however, at 5*l.* 10*s.* per cwt. for small, partly blocky and drossy mixed almonds, and 65*s.* per cwt. for common grey siftings, in block. For fair small to medium reddish almonds 16*l.* 10*s.* is required; and a bid of 10*l.* for good small to medium block, partly drossy mixed drop, was

refused. *Sumatra* benzoin in very large supply, no fewer than 503 packages being shown to-day. The business done comprised only 60 cases, which sold at fairly steady prices for good quality, viz., 8*l.* for nice pale almondy seconds, slightly brown corners, and 7*l.* 2*s.* 6*d.* for rather more false-packed ditto; medium grades were a few shillings lower. A large parcel of small to bold almondy centred seconds, slightly false-packed borders, realised only from 6*l.* 12*s.* 6*d.* to 6*l.* 15*s.* per cwt.; for ordinary thirds, brown borders, 90*s.* per cwt. was paid; 57 packages *Penang* gum were bought in at nominal prices, and of 206 boxes *Palembang*, 33 sold rather cheaply at from 25*s.* to 28*s.* per cwt.

BUCHU.—Slightly firmer. Of 29 bales of fine round leaves of the new crop recently arrived, offered to-day, 5 sold at the slightly-improved price of 3¾*d.* per lb.

CALUMBA.—Has been very scarce lately, especially in good qualities. An arrival of 191 bags has, however, come to hand from Bombay by the *India*. The market remains extremely firm, and high prices were asked for all varieties. The only lot sold was one of 61 bags ordinary rather small mixed, which realised 12*s.* 6*d.* per cwt. for sound and 11*s.* for damaged root. For very fine hand-picked and washed quality 85*s.* per cwt. is asked; 4 bags of this kind were shown to-day and bought in. For a lot of 7 bags fair bright washed yellow a bid of 42*s.* 6*d.* per cwt. was refused. It is said that sales of this kind have been made privately at 45*s.* per cwt.

CAMPHOR (CRUDE).—The quotation for *Formosa* camphor from China is 96*s.* per cwt., c.i.f. terms. No business is reported. There are no buyers for Formosa camphor at higher prices than 92*s.* 6*d.* per cwt., c.i.f., January-March shipment. For *Japanese* camphor the quotation, same shipment, is 115*s.*, c.i.f. nominally. On the spot there are several holders anxious to sell, but no business has resulted. At auction to-day 1 case of damaged Formosa realised 87*s.* 6*d.* per cwt.

CANNABIS INDICA.—The high price of 5*d.* per lb. was asked for 25 bales of fair quality, shown to-day. Four packages of apparently good quality from Demerara were offered without reserve, subject to paying charges, but no bid could be obtained.

CARDAMOMS.—The arrivals since our last report have been as follows:—29 cases, per *Sarpedon*, and 190 packages per *Bullionist*, total 219, all from Colombo. At to-day's auctions the large quantity of 250 cases was offered. Most owners were very willing to meet the market, and under these conditions 153 boxes found buyers at an irregular decline, ranging from 8*d.* to 11*d.* per lb on the better grades, 6*d.* to 7*d.* medium qualities, and about 5*d.* on ordinary kinds. Pickings sold in one instance at a decline of 1*s.* 3*d.* per lb., seed at a decline of 9*d.* to 10*d.*, and wild cardamoms at from 1*s.* to 1*s.* 2*d.* per lb. below the last auction rates. Some days previous to the sales some business had been done in medium lean Malabar kind at 3*s.* per lb. The following were to-day's auction prices:—*Mangalore* character, medium to bold round pale, 3*s.* 10*d.*; medium size, 3*s.* 6*d.*; small to medium, 3*s.*; very small pale, 2*s.* 7*d.*; small to bold mixed brown, 2*s.* 6*d.* per lb. *Ceylon-Mysore* and *Ceylon-Malabar*: fine bold round pale, 3*s.* 11*d.*; medium to bold good pale, 3*s.* 9*d.*; small to medium ditto, 3*s.* 1*d.* to 3*s.* 4*d.*; medium long pale mixed, 2*s.* 8*d.* to 2*s.* 10*d.*; small fair yellowish, long and round mixed, 2*s.* 7*d.* to 2*s.* 9*d.*; very small pale, 2*s.* 3*d.* to 2*s.* 4*d.*; partly opened brownish mixed, 2*s.* 1*d.* to 2*s.* 6*d.*; ordinary brown pickings, 1*s.* 10*d.* *Cardamom-seed* realised from 3*s.* 8*d.* to 4*s.*, and medium to fair *Wild cardamoms* from 2*s.* 6*d.* to 2*s.* 8*d.* per lb. One lot, however, was held at 3*s.* 6*d.* per lb.

CHAMOMILES.—The trade in this country are not buying to any considerable extent at present, but on the Continent the market remains very firm, and prices in Belgium are said to be above the London parity.

CINCHONA.—Twenty-two packages of South American wild *Red bark* from Colon, of which we announced the arrival last week, were offered to-day and sold, all but two, with very good competition at high prices. Fair pieces of medium red colour, all damaged, at 5*s.* 9*d.* to 7*s.* 6*d.* Small pieces at from 3*s* to 4*s.* 3*d.* Chips at 1*s.* 10*d.* to 2*s.* 3*d.*, and common small broken pieces without colour at from 9*d.* down to 2*d.* per lb. Of 51 bales *Guayaquil* Crown bark, 27 sold at fairly good prices, from 7*d.* to 10½*d.* per lb. for thin brown long quill, and from 5¾*d.* down to 3½*d.* for damaged lots. A good lot of mossy bark realised 1*s.* 4*d.* per lb. A parcel of damaged thin flat cultivated *Calisaya* realised from 1*s.* to 1*s.* 5*d.* per lb.

CINCHONIDINE still remains extremely firm. There are a good many inquiries in the market, but there is very little offering.

COLOCYNTH.—No further business is reported privately, but at to-day's sales 9 casks of good bright pale *Syrian* apple sold at from 1*s.* 10*d.* to 1*s.* 11*d.* per lb., which marks a slight decline in price. Another lot of very seedy, partly pale mixed apple realised 1*s.* 8*d.* per lb., subject to approval. Nine cases ordinary dark mixed *Spanish* were bought in at 1*s.* per lb., and of 23 bags pulp 3 sold comparatively cheaply at 5*s.* per lb.

COPPER SULPHATE.—Very scarce, and tending higher. Good brands could probably still be had at 17*l.* 15*s.* per ton in London, but 18*l.* is the general quotation for January delivery. Ordinary qualities 17*l.* per ton. The *Anchor* brand is also quoted at 18*l.*, f.o.b.

CUBEBS are about 5*s.* cheaper, and have now again reached almost the lowest price on record. Of 129 bags offered to-day, forty, fair bold berries, without stalk, from Bombay, sold at 25*s.* to 26*s.* per cwt. For a good lot of Singapore 30*s.* is asked, but that price cannot be obtained.

DRAGON'S-BLOOD.—Good qualities realised fair prices, 11*l.* 5*s.* per cwt. being paid for a case of bright red lump from Singapore. Fair quality sold at 6*l.* 7*s.* 6*d.*, and ordinary soft, seedy, mixed (without reserve) at 85*s.* to 90*s.* per cwt. Of 14 packages shown, 6 found buyers, and a lot of 5 cases dragon's-blood, in reed, of good quality, was bought in at 9*l.*

ERGOT OF RYE.—Twenty packages of *Spanish* ergot were received by the *Magdalena* from Vigo. It is reported that about 40 bags of ordinary wormy Spanish ergot have been sold privately at 6*l.* per lb. No sound ergot of new crop is being offered. At auction to-day 59 bags, all of ordinary wormy quality, were bought in at from 5*d.* to 8*d.* per lb. For fair Russian ergot the price asked is from 6¼*d.* to 6½*d.* per lb.

GALANGAL.—Good sound quality is still almost unobtainable. At sale to-day 82 bags very much sea-damaged sold without reserve "with all faults," and realised the fair price of 10*s.* 6*d.* to 11*s.* per cwt.

GAMBOGE.—Without alteration in price. Of 33 packages 6 sold at 8*l.* 10*s.* per cwt. for fair, partly blocky pipe, of good fracture. A lot of more broken and ricey mixed quality sold, subject to approval, at from 7*l.* to 7*l.* 10*s.*, and some fine bright, partly blocky, mixed gum was bought in at 9*l.* 10*s.* per cwt.

GUAIACUM.—Eight bales sold at 1*s.* 8*d.* to 1*s.* 10*d.* per lb. for good glassy block, and from 2*d.* to 4*d.* for common and drossy mixed.

GUARANA.—Two cases of fair quality were bought in at 2*s.* 2*d.* per lb. at the auctions, but subsequently changed hands at 1*s.* 10*d.*, a decline of about 4*d.* on the last quotation.

GUM ACACIA.—Five serons good pale *Soudan* sorts sold at auction to-day at the good price of 85*s.* per cwt., but 3 cases small pale *Trieste-picked* grain only realised 6*l.* 12*s.* 6*d.*, a very low price.

HONEY.—Fairly steady. Of 83 cases fairly clean, partly brown mixed *Californian* 20 sold at 28*s.* per cwt. The rest was bought in at 31*s.* per cwt. Another parcel of 25 cases good palish candied honey was bought in at 40*s.* per cwt., and 33 cases good pale to orange-coloured candied *New Zealand* at 42*s.* 6*d.* per cwt.

IPECACUANHA.—Fifty-one bales of *Brazilian* were shown to-day, and all bought in at nominal rates, 6*s.* 9*d.* per lb. for fair-picked, and 5*s.* 10*d.* per lb. for sound, partly stout. Fifteen bags of *Colombian* root were also bought in, but after the auction several packages changed hands privately on the basis of 4*s.* 2*d.* per lb. for good, slightly damaged.

KOLA-NUTS have been arriving freely, the *Angola* and *Niger* having brought 193 bags *West African* kolas

to Liverpool. At to-day's auctions 51 packages were offered of which 13 sold at rather cheap prices. West Indian, good sound, 5*d*. to 5½*d* ; ordinary mouldy, 2¼*d*. to 3½*d*. per lb. ; and mouldy West African, at 3*d*. per lb. Fair to good washed kolas bought in, at 6½*d*. to 8*d*. per lb.

MENTHOL slow of sale, and offering somewhat easier for arrival. The spot quotation for fair quality is 7*s*. 6*d*. per lb., but at auction to-day 25 packages were bought in at prices ranging from 7*s*. 3*d*. to 8*s*. ; for somewhat damp but otherwise fair quality, 7*s*. 3*d*. would have been accepted. For arrival the prices are also somewhat lower, 6*s*. 9*d*. per lb., c.i.f., being asked for January-March shipment.

MUSK.—Privately, the market still remains very firm, and further sales of fine blue skin first pile *Tonquin* pods are reported at 90*s*. per oz., while for good third pile pods 30*s*. per oz. is quoted. At auction 10 tins of first pile were bought in, and of 7 tins third pile, 2 ordinary damp and badly trimmed, sold at 25s. per oz.

MYRRH remains low in price; 63 packages were offered to-day, of which 11 sold at 42*s*. per cwt. for good coarse pale siftings, and 33*s*. for fair quality, the last-named parcel being without reserve. A lot of good pale picked gum was bought in at 5*l*. 15*s*., an offer of 5*l*. being rejected. It is said that some business in this quality has been done privately recently at 5*l*. 5*s*. per cwt.

NUX VOMICA is scarce and held for higher prices, 9*s*. per cwt. being asked for a lot of 31 boxes small grey seed which was offered to-day ; a bid of 6*s*. 6*d*. was made without success.

OIL (CASTOR).—Quiet and somewhat easier. The importers are at present being undersold by secondhand holders, and find it difficult to do business. At auction, however, fairly good prices were realised, a few lots of good first pale *Calcutta* oil selling at 3¾*d*. per lb. ; second quality was bought in at 3½*d*.

OIL (COD-LIVER).—We hear of no business worth mentioning, and probably nothing will be done until reliable reports of the new fishing are to hand. Meanwhile the market is neglected, and there would be sellers at easier rates. *Isdahl's* non-freezing oil of the new crop, to be delivered as soon as ready, offers at 135*s*. c.i.f. terms. For old oil on the spot prices vary, the highest quotations being apparently 150*s*. c.i.f. for *Lofoten*, and 130*s*. for *Finnmarken*. At auction 85 casks *Norwegian* were bought in, 25 of these imported from Aalesund, at 6*l*. 15*s*. per barrel ; 18 casks of non-freezing Newfoundland were also bought in at 160*s*. per barrel. The price wanted for these is 150*s*., but that cannot be obtained. Second quality *Newfoundland* offers at 5*s*. 6*d*. per gallon.

OILS (ESSENTIAL).—There are not many alterations to report in this market. *Star-anise* has again been lower, and at one time this week a holder seemed willing to sell at 6*s*. 6*d*. per lb., on the spot. But it is said that when a counter offer of 6*s*. 4½*d*. was made to him he refused to accept it, and advanced his quotation to 7*s* per lb. It is said that since then business has been done, on the spot, at that figure. For shipment the price is 7*s*. per lb., c.i.f., January-February. At auction 5 cases were offered and bought in at from 7*s*. to 8*s*. 6*d*. per lb. *Cassia oil* much neglected. No sales were made at auction, although 15 cases were offered, and had partly been catalogued without reserve. Oil containing 88·5 per cent. cinnamic aldehyde was bought in at 9*s*. per lb., and for 40 to 45 per cent. oil a bid of 4*s*. 6*d*. per lb. was asked without result. *Cinnamon oil* from bark and leaf was represented by 21 cases. The bark oil was bought in at 1*s*. ; the leaf oil at 5*d*. to 6*d*. per oz. *Citronella* offers are lower prices—namely, 1*s*. 2½*d*. per lb. on the spot, and 1*s*. 2*d*. c.i.f. In *Lemongrass oil* the quotation remains at 2½*d*. per oz. on the spot ; for shipment, secondhand holders ask 2¾*d*., c.i.f., but a fraction under that price would probably be accepted. Of West Indian *Bay oil* 3 cases were offered to-day, of which 1 sold at 8*s*. 8*d*. per lb. Five cases *Cedar-wood oil* were bought in at 1*s*. 1*d*. per lb., and 5 bottles *Ylang-ylang* second quality, at 3*s*. per oz. There was a large supply of *Oil of eucalyptus*, of which 14 cases good pale yellow oil from Melbourne realised 10*d*. per lb. Amygdalina sold at 1*s*. per lb., and for *Risdonia* 1*s*. 6*d*. is asked. *Platypus oil* was bought in at 2*s*. 2*d*. per lb. There was no answer to a suggestion of 1*s*. 10½*d*., although probably that would not have been accepted, either. For 10 cases good *Eucalyptus* from Adelaide, a bid of 10*d*. per lb. is to be submitted. *American peppermint oil* is somewhat easier on the spot, H.G.H being now offered at 7*s*. 6*d*. per lb. Japanese *Peppermint oil* offers at 3*s*. 3*d*. per lb., c.i.f. terms, for dementholised ; and at 4*s*. 3*d*. per lb., c.i.f., for 40 per cent. quality. At auction 2 cases dementholised oil were bought in at 3*s*. 3*d*. per lb. There has been a considerable drop lately in the price of West Indian *Oil of limes*, but it is said that there are signs pointing to a firmer market before long. Among English-drawn essential oils which have lately been reduced in price are *Celery*, which is now quoted at 23*s*. per lb. ; *Concrete orris oil*, present price, 36*s*. per oz., and *Oil of nutmeg* at 6½*d*. per oz.

ORRIS-ROOT.—There is very little disposition to buy on this market—at any rate if the actions are any guide. Thirty-five bags of *Florentine* root were bought in there at from 70*s*. to 75*s*. per cwt. for good pale. Six bags lean *Veronese* were also bought in, and 20 packages of ordinary brown *Aden* likewise at 15*s*. per cwt.

PILOCARPINE has been further considerably reduced, one maker now asking 2*s*. per gramme for either *Hydrochlorate* or *Nitrate*.

POTASH SALTS.—*Permanganate* extremely firm. Some business in small crystals is reported at 72*s*. 6*d*. to 75*s*. per cwt., by second-hand holders, but it is said that a slight advance on the higher price would now be obtainable. The makers' agents still offer small crystals at 70*s*., and large at 75*s*. per cwt., for delivery during the coming summer. *Chlorate* fairly steady, at 4¼*d*. per lb. in London and 4⅛*d*. per lb. f.o.b. Liverpool. The United Alkali Company's quotation is 4¼*d*. per lb.

QUININE.—Without alteration. The nominal quotation for secondhand German bulk remains 9*d*. per oz.

RHUBARB.—It is claimed that almost all root of good quality is in the possession of two importers, who ask high prices. The general tendency of the market, however, is very dull, and of 77 packages offered to-day only 12 sold at rather easier rates, viz. 11½*d*. for medium to bold fair coat *Canton*, flat and round, pinky-grey fracture, and 11¼*d*. per lb. for small to medium round ditto. A bid of 8½*d*. per lb. for medium to bold flat *High-dried*, dull grey fracture, was rejected.

SARSAPARILLA.—Grey *Jamaica* root, which was represented by 20 packages, realised steady prices, 14 bales being sold at 1*s*. 6*d*. per lb. for sound, and 1*s*. 4*d*. to 1*s*. 5*d*. for damaged root. For 3 bales damaged *Lima* 12½*d*. per lb. was bid and refused. *Honduras root* was represented by 17 serons, of which 2 sold at 11*d*. per lb. Of East Indian *Smilax*, 4 bales sold very cheaply at ½*d*. per lb.

SENNA.—*Tinevelly* leaf was represented by 517 bales, all of which sold at rather easier rates for ordinary grades, of which almost the entire supply consisted. A few bales of fine leaf, on the other hand, realised better prices—viz., from 3½*d*. per lb. up to 4¾*d*. for fair to good green leaf. Small to medium greenish, partly specky, to ordinary yellowish and dull small leaf brought from 2*d*. to 1*d*. per lb. Of *Alexandrian* senna 36 bales sold without reserve at 3½*d*. to 3¾*d*. for siftings and 3¾*d*. to 4*d*. per lb. for sorts. A few consignments, amounting to 322 bales, have come to hand this week by the *India* from Bombay.

SHELLAC.—No auctions have been held this week. Privately the market remains very dull, with an easier tendency owing to the reported large shipments from Calcutta. On the spot some business has been done in second *Orange* at the parity of 78*s*. per cwt. for fair TN ; while *Garnet* has changed hands at 84*s*. for free, and 82*s*. for cakey, AC. Sales of TN *Orange* for March delivery are also reported at 74*s*. per cwt.

STAR ANISE.—The small spot supply is mostly in the hands of two importers, who ask high prices—viz. 100*s*. to 102*s*. 6*d*. per cwt. for genuine *Chinese*. For arrival the market is somewhat firmer, 80*s*. per cwt. c.i.f. being quoted. To-day at auction 5 cases slightly mouldy *Chinese* of good aroma were bought in at 110*s*., 100*s*. being suggested.

TEA.—The Indian market has opened very firmly after the

holidays. The terminal market, for no very apparent reason beyond a general notion that there is room for an advance, has suddenly jumped up three or four points, and while Monday's heavy Assam sale showed very firm prices, Wednesday's small sale showed a distinct advance in all Pekoes under 1*s.* and especially under 7*d.* Ceylons on Tuesday, however, did not share the firmness of Indians, at any rate in the case of teas, for price, and useful sweet leaf teas at 5*d.* they looked cheap enough. But it was a poor sale as far as quality was concerned, and there will no doubt be a lot of low Ceylon on the market the next few months.

VALERIAN-ROOT.—Tending somewhat easier. New crop *Belgian* root offers at 27*s.* 6*d.* to 28*s.* per cwt.; while for old crop 25*s.* or 26*s.* would be accepted.

VANILLA still continues to arrive freely. The *India* has brought 59 packages from Bombay. In consequence of the heavy drug-auctions advertised for to-day, the vanilla sales have been postponed until to-morrow, Friday, at 11. On that occasion 653 tins, mostly *Seychelles* and *Mauritius* kinds, will be offered. Privately the market remains firm.

VARIOUS DRUGS.—*Ambergris* is very quiet. A 2¼-oz. tin of common quality sold to-day at 26*s.* per oz. *Ammoniacum gum* neglected. Nine cases fair blocky mixed drop from Bombay were bought in at 50*s.* per cwt., ordinary partly blocky at 35*s.* per cwt. *Cascara sagrada* neglected. Eighty bales of fair quality were offered to-day and bought in at 16*s.* per cwt. Probably the owner would be glad to take 6*d.* less. *Civet* quiet. It is said that there is very little of fine quality to be had. Five horns shown to-day were bought in at 30*s.* per oz. Twenty baskets lean but sound E.I. *Cassia fistula* were bought in to-day at 20*s.* per cwt. *Coca-leaves* neglected at auction to-day, 69 bales of medium quality from Salaverry were bought in at nominal prices. A bid of 31*s.* per cwt. was refused for 6 bales ordinary brownish and rather broken *Cascarilla*; 30 cases fair Manila *Elemi* gum were bought in at 30*s.* per cwt., and for 5 bags rather small *Gentian* root a bid of 27*s.* 6*d.* per cwt is to be submitted. Four bags *Rhinoceros* brand biennial *extract of henbane* (1896), which have been offered before, were again shown. The price is 4*s.* 6*d.*, but no one would pay it. *Jalap.*—Two parcels were bought in, the better one, consisting of partly fairly heavy *Vera Cruz* root, at 7½*d.* per lb. For part of 18 cases fair *Kamala* a bid of 5½*d.* per lb. was refused, and the parcel taken in at 1*s.* per lb. Seven packages *Kino* gum (mostly spurious) were also bought in—fair quality at 6*s.* per lb., ordinary ruby, mixed with wood, from Bombay, at 30*s.* per cwt. A bid of 25*s.* per cwt. for this kind was refused. 112 cases of new Italian *Liquorice-juice*, brand Barone Amarelli, were bought in to-day at 75*s.* per cwt.; and 8 cases *Mastic gum* were bought in at 1*s.* 10*d.* per lb. for fair pale, and 1*s.* 8*d.* for yellow drop. Eight cases fair bright fresh *Nutmeg-paste*, from Singapore, are held for 2¾*d.* per oz. *Orange-peel* remains neglected, 7*d.* being the price at which the bulk of thin Malta peel offered to-day was bought in. One case of fine new bright Tripoli was sold privately. The price did not transpire. There was a parcel of 35 bales of *Patchouly-leaves* from Penang, but it did not sell. Damaged, mouldy, and very stalky leaf is held for 2½*d.* per lb.; stalky, mixed with some leaf, at 1*d.* per lb. Part of the parcel had originally been of better quality, but it had got very damp and black. This was bought in at 5*d.* per lb. Forty casks good thick *Chinese soy*, were reported partly sold by private contract. Thirty-nine bags *Squill* were all bought in; fine pale dried at 5*d.*; ordinary to fair 3*d.* to 4*d.*

WAX (BEES').—There was a good demand for all the principal varieties to-day. Twenty-two packages Jamaica wax realised steady prices—namely, from 8*l.* to 8*l.* 2*s.* 6*d.* per cwt. for fair yellow and red mixed. Two cases good Chilian sold at 6*l.* 5*s.* per cwt., and for one lot of fair Australian, mixed colours, 6*l.* 12*s.* 6*d.* was accepted. Madagascar wax was in large supply, 520 packages being offered, of which 240 sold at firm prices, and good bright realised 6*l.* 5*s.*; fair, 6*l.* to 6*l.* 2*s.* 6*d.*; and ordinary wormy, 5*l.* 15*s.* to 5*l.* 17*s.* 6*d.* Of Zanzibar wax 40 packages sold at from 5*l.* to 5*l.* 17*s.* 6*d.* for fair to good quality, and at 46*s.* per cwt. for very ordinary dark. Three cases South American beeswax realised 6*l.* 15*s.* per cwt., and a large quantity of bleached Calcutta was bought in. A somewhat novel feature at auctions was the offering of 15 bags (altogether about 13 cwt.) of beeswax from Fort Salisbury in Rhodesia, the bulk of which was bought in, only 3 bales small pale balls selling at 85*s.* per cwt.

The Liverpool Drug-market.

Our Liverpool correspondent, writing on the 6th inst., reports there is rather more inquiry for *Beeswax*, and sales of Chilian are being made at a slight advance on late rates, grey to yellow fetching 6*l.* 12*s.* 6*d.* cwt. to 7*l.* per cwt., pale being worth 7*l.* 10*s.* to 8*l.* Gambia W.C.A. is held for 6*l.* 10*s.* *Castor oil* is exhibiting few fresh features; good seconds Calcutta are offering at 3*d.* to 3⅛*d.* per lb. and Madras is obtainable at the same figure, and first pressure French is quoted at 2¾*d.* per lb., but business for the moment in the article is confined to very narrow limits. *Fenugreek seeds* are firmly held at 11*s.* per cwt. Russian *Anise* is held at prices ranging from 14*s.* 6*d.* cwt. to 18*s.* 6*d.* cwt. as in quality. *Sulphate of copper* is very firm indeed, spot and forward, at 18*l.*, and large parcels are changing hands. Fourteen bales of *Jaborandi*, mixed grades, have been offered at auction, but 1*s.* cwt. only was bid, at which the lots were withdrawn. *Honeys* are steady at late rates. The market is practically cleared of black and frosted Pará *Tonca beans*. During the late season none have come forward. Fifty-three packages of *Aloes* (Curaçao description) were offered at auction, and 13*s.* 6*d.* per cwt. was bid for part, but the parcel was withdrawn for 20*s.* per cwt.

The Hamburg Drug-market.

Our Hamburg correspondent writes on January 5:—"Business in general remains quiet here, the strike is still continuing, and there seems at present very little inclination on the part of strikers to accept new engagements. The drug-market is dull, and prices show very few alterations since last week. *Japanese isinglass* (*Agar-Agar*) is unchanged, quiet, at 265m. per 100 kilos. *Antimony* a little firmer, and quoted to-day at 38m. per 100 kilos. *Tartaric acid* quiet, at 230m. to 225m. per 100 kilos. *Balsam copaiba* is unchanged, at 3.90m. to 4m. per kilo. for genuine Maracaibo. *Peru balsam* is quiet, at 16m. to 15½m. per kilo. *Tolu balsam* easier, at 5m. to 4.75m. per kilo. *Cape aloes* unchanged, at 45m. to 46m. per 100 kilos. *Camphor* (*refined*) is still very quiet and without demand, at 260m. to 265m. per 100 kilos. *Chlorate of potash* unchanged, at 76½m. to 77m. per 100 kilos. *Cantharides* (Prime Russian) are quoted at 410m. to 420m. per 100 kilos. *Coca-leaves* very quiet, at 130m. to 140m. per 100 kilos. *Cascara sagrada* unchanged, at 32m. per 100 kilos. *Ergot of rye* unchanged since last week, at 95m. to 100m. per 100 kilos. *Glycerine* continues firm. *Gum-acacia* shows very little business at present. *Anise-seed* is firm, Russian-seed is held for 28m. to 29m. per 100 kilos. *Cumin-seed* (Maltese) unchanged, at 45m. per 100 kilos. *Coriander-seed* is quoted at 13½m. to 14m. per 100 kilos.

The Smyrna and Constantinople Opium-markets.

Our Smyrna opium-letters are dated December 26. In the week ending on that date 135 cases had changed hands, of which 60, at the parity of 9*s.* 4*d.* per lb., were for account of the Dutch Government, 68 for export to U.S.A., and the balance for England and France. It is known that there are further American orders in the market, but they are limited at 80 piastres for *tale quale*, whereas the last price accepted for this kind was 81 piastres, and buyers will not give way further. There is no change in the market. Our Constantinople correspondent writes on December 31:—"About 150 cases of opium have changed hands during the past fortnight, of which 31 cases were *Soft* kinds at up to 9*s.* 9*d.* per lb., f.o.b., for stuff containing 50 to 60 per cent. firsts and 40 to 50 per cent. of ordinary. Druggists' grades have sold at 8*s.* 9*d.* to 8*s.* 8*d.* per lb., f.o.b. Apparently the late heavy American purchases here and in Smyrna are consequent on rumours of a possible duty on opium in America. During the past four months the United States has bought close upon 2,000 cases. Taking everything into consideration, the position of the article is healthy. Prices are low, and will probably not recede any further, even with favourable prospects of new crop."

Price-list of Heavy Chemicals, Oils, &c.

THE following are the current wholesale market quotations of heavy chemicals, coal-tar products, and oils not specially enumerated in other parts of the Trade-report.

Where short rules (—) are marked in the second column, prices are the same as on August 27 last.

Articles	Price, Aug. 27, 1896 £	s.	d.	Price, Jan. 7, 1897 £	s.	d.
ACID—						
Acetic, sp. gr. 10·40 (from acet. soda) per ton	17	0	0		—	
25 p.c. (from acet lime) .. „	6	15	0		—	
Boracic, crystals .. .. .. per cwt.	1	9	6	1	10	0
Powder .. .. „	1	11	6	1	12	0
Carbolic, crystals, 34°–35° C. .. per lb.	0	0	6¾	0	0	7
39°–40° C. .. .. .. „	0	0	6¾	0	0	7⅝
Crude, 60 per cent. .. .. per gall.	0	2	0	0	2	0
75 per cent. .. .. .. „	0	2	4	0	2	5
Liquefied .. .. „		—			—	
Cresylic .. .. „	0	1	0	0	0	11½
Citric, B.P. .. .. per lb.	0	1	2½	0	1	1½
Oxalic .. .. „	0	0	3¾	0	0	3¾
Picric, crystals .. .. .. „	0	0	11	0	0	11
Tartaric, B.P. .. .. „	0	1	3	0	1	0½
ALKALI—						
‡ White, 48 per cent .. .. per ton	4	10	0	4	17	6
‡ 50 per cent. .. .. .. „	4	15	0	5	2	6
‡ 52 per cent. .. .. .. „	5	0	0	5	7	6
ALUM—						
§ Lump, in casks .. .. .. „	4	15	0	4	12	6
§ Ground, in bags .. .. .. „	5	10	0	5	7	6
ALUMINA—						
Carbonate .. .. per cwt.	1	17	6	3	15	0
Ferric .. .. per ton		—		2	12	6
Hydrate .. .. „		—		13	0	0
‡ Sulphate, white lump .. .. „	3	17	6	3	17	6
‡ Crushed .. .. „	4	0	0		—	
AMMONIA—						
Carbonate .. .. per lb.	0	0	3¼	0	0	3
Muriate, white large grain .. per cwt.	1	3	0	1	16	0
White small grain .. .. „		—		1	6	0
Grey .. .. „	1	6	0	1	2	0
Sal ammoniac, first white .. „	1	19	0	1	15	0
Second .. .. „	1	17	0	1	13	0
Sulphate, Leith .. .. .. per ton	7	11	3	7	15	0
Hull .. .. „	7	12	6	7	15	0
Liverpool .. .. „	7	12	6	7	17	6
Beckton .. .. „	7	11	3	7	15	0
ANILINE—						
Oil .. .. per lb.	0	0	9¾	0	0	9½
Salt .. .. „	0	0	8¼	0	0	9
ANTHRACENE—						
A grade .. .. per unit	0	0	9¾	0	0	8½
B grade .. .. „	0	0	8¼	0	0	7½
ARSENIC—						
Lump, best white .. .. .. per ton		—		28	0	0
Powder, best white .. .. .. „	23	5	0	24	0	0
BARIUM—						
‡ Carbonate precipitated .. .. „	8	10	0	8	15	0
‡ Mineral .. .. „	4	0	0		—	
‡ Chloride calcined .. .. .. „	6	10	0	6	12	6
‡ Crystals .. .. „	7	5	0	7	2	6
‡ Sulphide .. .. „	4	15	0		—	
‡ Sulphate (blanc fixe) .. .. „	7	5	0		—	
BAUXITE .. .. „		—		0	16	0
BENZOL—						
90 per cent. .. .. per gall.	0	4	1	0	2	11½
50–90 per cent. .. .. .. „	0	3	0	0	2	7
BLEACHING-POWDER—						
§ Hardwood casks .. .. .. per ton	6	15	0	6	12	6
§ Softwood casks .. .. .. „	6	10	0	6	7	6
CAKE—						
Cottonseed .. .. „	3	17	6	4	0	0
Linseed .. .. „	5	12	6	5	15	0
CALCIUM CHLORIDE .. .. „				2	5	0
COPPER—	16	10	0			
Sulphate (Anchor) .. .. .. „		—		18	0	0
CREASOTE OIL—						
Filtered .. .. per gall.	0	0	1¾	0	0	2½
Ordinary liquid .. .. .. „	0	0	1⅜	0	0	2
HYDRATE OF BARYTA .. .. per ton		—		13	0	0
IRON SULPHATE—						
(Green copperas) Lancashire .. „	1	15	0	1	18	0
Welsh .. .. „	1	14	0	1	16	0
LEAD—						
† Acetate, white .. .. .. „	23	0	0	22	5	0
† Brown .. .. „	16	0	0	15	10	0
† Nitrate .. .. „	18	10	0	18	5	0
LIME—						
Acetate, brown .. .. .. „	4	2	6	4	15	0
Grey .. .. „	8	10	0	8	5	0
Carbide (acetate of calcium) .. „	25	0	0	24	0	0
MAGNESIUM—						
Carbonate .. .. per cwt.	1	17	6	2	0	0
Sulphate (Epsom salts) .. .. per ton	4	0	0	3	15	0
NAPHTHA—						
Coal-tar, crude, 30 p. c., at 120° C. per gall.	0	0	11	0	1	1½
Solvent, 90 p. c. at 160° C. .. „	0	1	5	0	1	7½
95 p. c. at 106° C. .. .. „	0	1	4½	0	1	8½

Articles	Price, Aug. 27, 1896 £	s.	d.	Price, Jan. 7, 1897 £	s.	d.
NAPHTHA—						
Solvent, 90 p. c. at 190° C. .. per gall.	0	1	1½	0	1	4
Wood, Miscible, 60 o.p. .. .. „	0	2	9	0	2	10
Solvent .. .. „	0	3	0	0	2	8
NAPHTHALIN-BALLS—						
White crystals .. .. .. per lb.	0	0	3¼	0	0	3½
OILS—						
Castor, first Calcutta .. .. „	0	0	3¼	0	0	3¾
Second .. .. „	0	0	3	0	0	3⅜
Madras .. .. „		—		0	0	2⅞
First pressings, French .. .. per ton	21	10	0	27	10	0
Second .. .. „	20	10	0	26	10	0
Mitchell's pure London cold drawn per lb.	0	0	3⅜		—	
First pressings .. .. .. „	0	0	2½		—	
Cocoanut, Ceylon .. .. .. per cwt.	1	3	0	1	3	9
Cochin .. .. „	1	6	6	1	7	9
Cottonseed, crude .. .. .. „	0	13	6	0	13	3
Refined, Liverpool .. .. „	0	16	4½	0	16	3
American .. .. .. „	0	15	7½	0	15	9
Linseed .. .. „	0	16	7½	0	17	6
§ Olive, Spanish .. .. .. per tun	29	0	0	29	0	0
§ Syrian .. .. „	29	0	0	29	0	0
§ Moroccan .. .. .. „	31	10	0	31	10	0
§ Candiote .. .. „	19	10	0	19	10	0
§ Palm, Lagos .. .. .. per ton	1	1	0	1	3	0
§ Cameroons, &c. .. .. .. „		—			—	
Petroleum, Amer. ord. good .. per gall.	0	0	5 7/16	0	0	6¼
Water-white .. .. .. „	0	0	6¼	0	0	7¼
Russian .. .. „	0	0	5	0	0	5¾
Rape, crude .. .. per cwt.	1	4	6	1	6	0
Refined .. .. „	1	5	6	1	7	6
Jamba .. .. „	1	2	0		—	
Ravison .. .. „	0	18	0	1	0	0
PEARL HARDENING .. .. per ton		—		3	2	6
PHOSPHORUS—						
Wedges .. .. per lb.	0	2	0		—	
Sticks .. .. „	0	2	1		—	
PITCH .. .. per ton	1	14	0	1	7	0
POTASSIUM—						
† Bichromate, Eng. and Scotch del. per lb.	0	0	4½		—	
† Export .. .. „	0	0	4¼		—	
Chlorate .. .. „	0	0	4⅝	0	0	4¼
Nitrate saltpetre, casks .. .. per cwt.	1	1	3		—	
ditto kegs .. .. „	1	2	3		—	
Prussiate, yellow .. .. .. per lb.	0	0	7	0	0	6¼
SODIUM—						
Aluminate .. .. per cwt.	2	5	0		—	
Borate (borax) crystals .. .. „	0	19	6		—	
Powdered .. .. „	0	19	6	1	0	6
Bichromate, Eng. and Scotch del. per lb.	0	0	3¾		—	
† Export .. .. „	0	0	3¼		—	
Bicarbonate .. .. per ton	6	5	0	6	10	0
Carbonate, caustic soda ash .. „	4	5	0		—	
Carbonated .. .. .. „	4	0	0		—	
Alkali, 52 per cent. .. .. „	3	12	6		—	
Soda crystals .. .. .. „	2	2	6		—	
Chlorate .. .. per lb.	0	0	5¾	0	0	5¼
‡ Hydrate, 77 p. c. caustic soda .. per ton	9	5	0	9	0	0
§ 74 per cent. .. .. .. „	8	5	0		—	
§ 70 per cent. .. .. .. „	7	7	6	7	5	0
§ 60 per cent. .. .. .. „	6	7	6	6	5	0
§ 60 per cent. cream .. .. „	6	7	6	6	5	0
‡ Hyposulphite, casks, ⅞-cwt. .. „	5	17	6	5	7	6
‡ Kegs, 1-cwt. .. .. .. „	6	7	6	5	17	6
Nitrate .. .. per cwt.	0	8	0	0	7	10½
Refined .. .. „		—		0	8	3
Phosphate .. .. per ton	15	0	0	14	5	0
‡ Silicate, 75° Tw. .. .. .. „	2	12	6		—	
‡ 100° .. .. „	3	0	0		—	
‡ 140° .. .. „	3	7	6		—	
‡ Green lump .. .. .. „	4	7	6		—	
‡ Brown .. .. „	4	10	0		—	
Sulphate, saltcake .. .. .. „	1	5	0	1	2	6
SOUTH DURHAM SALT—						
* Common .. .. „	0	9	6	0	9	0
* Blocks .. .. „	0	15	0		—	
STRONTIUM—						
Carbonate precipitated .. .. „		—		8	0	0
Hydrate 100 p. c. .. .. .. „		—		8	10	0
SULPHOCYANIDES—						
Ammonium .. .. per lb.	0	0	6½		—	
Barium .. .. „	0	0	4½		—	
Potassium .. .. „	0	0	6¾		—	
SULPHUR—						
Recovered .. .. per ton	4	15	0	5	0	0
Roll .. .. „	6	0	0	6	10	0
Flower .. .. „	5	15	0	7	10	0
TAR—						
Refined .. .. .. per barrel	0	10	6	0	10	0
TARTAR, CREAM OF—						
Crystals .. .. per cwt.	4	7	0	4	2	0
Powdered .. .. „	4	11	0	4	4	0
TIN CRYSTALS .. .. .. per lb.		—		0	0	5¼
TOLUOL—						
Pure .. .. per gall.	0	2	1	0	1	11
TURPENTINE—						
American spirits .. .. .. per cwt.	0	18	6	1	0	6
ZINC—Sulphate .. .. .. per ton	6	15	0	6	12	6

‡ Denotes f.o b. Tyne. § Denotes f.o.b. Liverpool.
† Denotes f.o.b. Glasgow. * Denotes f.o.b. Tees.

CORRESPONDENCE

Notice to Correspondents. *In writing letters for publication, correspondents should adopt a concise, but not abbreviated, style. They are requested to write on one side of the paper only. Letters, with or without a nom-de-plume, must be authenticated by the name and address of the writer. Queries should be written on separate pieces of paper, and the regulations printed under the sections to which they apply should be strictly observed.*

Otto-of-rose Factors.

SIR,—As Mr. Conroy has mentioned my name in a letter in your last issue, in which he takes exception to your remarks on the subject in your review, "Pharmacy in 1896," I may be pardoned for again referring to the matter. He takes particular exception to your comment, "So far, nothing but pure otto can pass the four specific tests, viz.: density, freezing-factor, optical rotation and alcoholic percentage," and attempts to prove "that this fourth test is as much a 'will-o'-the-wisp' as the other three." Now Mr. Conroy has taken one of the tests proposed by me—viz., an alcoholic percentage of 71 to 72½—and three recorded by others—viz., specific gravity, freezing-point and optical rotation—and has shown that an otto adulterated to the extent of 10·7 per cent. with geranium oil can pass these tests; but the important difference in the limits mentioned by Mr. Conroy and those which I have proposed is seen in the following table:—

	Conroy's Table.	Umney's Table of Characters of finest Ottos. *C. & D.* November 28, 1896.
Freezing-point ..	65°–68° F.	20·4° C.–21° C. (68·7°F–69·8°F)
Sp. gravity at 30°..	0·850–0·856	0·856–0·860
Optical rotation ..	−2·3° to −2·7°	—
Alcoholic percentage	—	71–72·5

With reference to the figures in Mr. Conroy's table, it is well to point out that the specific gravity and freezing-point do not accord. So far as I have observed, ottos having a specific gravity of less than 0·856 at 30° C., owing to their high stearoptene percentage, and consequently less odour value, have a freezing-point of at least 21° C., this factor increasing as the specific gravity diminishes. Moreover, numerous experiments have shown that ottos having a specific gravity midway between those limits will have lower alcoholic percentages than 71. I think one must suppose that in referring to the four specific tests, those that are in agreement amongst themselves—such as I have recorded—must be intended. As I have stated in a previous letter, the optical rotation results may be misleading, but the three limits of specific gravity, freezing-point and alcoholic percentage which I have suggested include the finest normal ottos obtainable. Faithfully yours,

JOHN C. UMNEY.

Southwark Street, S.E., January 6.

Dr. Rentoul and Prescribing Chemists.

SIR,—I, with others, have been much amused in reading Dr. Rentoul's suggested strictures touching the above subject in your last issue, and your own very able criticism in reply to him. He is evidently one of those individuals who is fired with professional enthusiasm, and who, in his newly-acquired position on the Medical Council, may be anticipated to wish to apply some of those irrepressible energies which have helped to place him at the head of the poll. Let us hope, however, that he will be open to be convinced of what is just and reasonable in his recommendations to his medical brethren, towards a numerous class of intelligent and self-denying men, as are the chemists of to-day, or I do not hesitate to affirm he will land both himself and friends on the "horns of a dilemma."

In the year 1878 I, in conjunction with the Chemists' Trade Association of Birmingham, defended successfully the oft-quoted case of Apothecaries' Company *v.* Shepperley, and have frequently been called upon to give information as to my experience of the question. It would probably interest some of your readers a little were I to narrate an incident which occurred at the hearing of it in the Exchequer Division in London, before Baron Pollock, and which did not get reported at the time. The Judge, not being acquainted with the details of the provisions of the 1815 Act, inquired of the leading counsel for the prosecution, Mr. Day, Q.C. (now Judge Day), if it were intended to prevent persons like himself from visiting the chemists for simple ailments, "because," said he "I frequently call on a chemist in Chancery Lane, on my way to chambers, when I am troubled with a sore throat or cold, and invariably obtain relief of the proprietor, who I know is 'only' a chemist?" "Yes, my Lord," rejoined Mr. Day, "that is the question at issue." "Oh! then," replied the Judge, "if you fail to prove your case, I will give full costs against you." The failure was complete, and the costs followed.

A further incident happened upon the counsel drawing from his pocket a pamphlet I had compiled and published, as a protection to myself against further similar attacks, should the Medical Union of Nottingham think it desirable to renew their efforts. This pamphlet was entitled "Every-one his Own Doctor," and contained 100 remedies for the same number of "simple ailments." The Judge asked to see it, and, on my handing one to the bench, expressed his gratification on reading that in future it would be possible to select from it just the one remedy suitable to the want of the moment, and thereby avoiding any infringement of the Apothecaries Act.

This may be the condition (let us hope not) which will be the only resource of the chemist of the future in case undue oppression is manifested by the leaders of a supposed "liberal and enlightened profession."

I am yours faithfully,

GEORGE SHEPPERLEY.

[We can hardly suppose that Mr. Shepperley's memory has played him a trick in reference to the first incident he narrates, and yet it would be very curious, first, that our reporter should have passed over such a striking remark from the Judge, and, secondly, that a very similar occurrence should have happened in a case tried a few months before Mr. Shepperley's—namely, the Apothecaries' Company *v.* Wiggins. In reference to some remark by Mr. McIntyre, counsel for the defence, Mr. Justice Field is reported (*C. & D.*, June 15, 1878, page 261) to have said:—

"I have done it myself. There is a very highly respectable chemist opposite the Temple—Mr. Peller—and I have gone to him many and many a time, and, having said 'I am not very well this morning,' he has given me a remedy. He is no doubt an apothecary—at least I think so."

Mr. McIntyre: "He will be here to day, and will tell you he is not."

The writer of this note was in Court throughout both trials, and has no recollection that Baron Pollock, like Justice Field, confessed to having incited a chemist to commit an offence.]

The Manufacture of Quinine.

SIR,—Your much-esteemed journal contains, in its last number, the announcement of a decision arrived at by several manufacturers to place upon every tin of quinine the date of its manufacture. Permit us to say that this system has been in use in the Fabbrica Lombarda ever since the foundation of that factory, and that one may see clearly stamped upon every tin the day, month, and year when the package left the factory.

We think it will interest your readers to know this. Receive, Sir, the assurance of our distinguished consideration.

Il Direttore,
Amministratore Delegato della Fabbrica
Lombarda di Prodotti Chimici.

Milan, January 4. A. CARUNNELLI.

Chemists Combining.

SIR,—I regret that more notice has not been taken of my letter of December 5, either through your columns or privately. I have received communications from as far south as Plymouth (where the Armada business was done) to Middlesborough in the North, from chemists who see the necessity of federation.

The P.A.T.A. is in a sense inviting our trade to combine in helping our worst enemies, the proprietary-medicine men—the men who are gradually gripping us by the throat—and will make our business one that will be simply to stock their goods and pass over to the public at a minimum of profit. The American chemists are in this pitiable condition through the constant rush on the market of new specialities. Before we get to that state let us stem the tide (if not we sink), and combine to hold the manufacture and sale amongst ourselves.

Surely we can do as much as the poor working-man, with his small wage and his grand example, in the matter of trade unionism; we might form one gigantic trust, to boom the public with one pill (worth 25*s.* per box), one emulsion, one syrup, &c., and reap a handsome profit out of the undertaking; supply shareholding-chemists only (thereby gently leading into the fold the non-unionists), prevent undersell-ing, and drive the medicine-men, who are striving to sap our trade to its foundations, out of existence.

It is not only in taxed medicines that we are handicapped; the public are now made to require pepsin, pot. chlor., am. chlor., one-drop doses of tinctures, and a hundred other things in compressed form; and one section must have them prepared by Smith, another by Jones, another by Brown, and we are supposed to stock each make of each drug, or be out of the class of respectable chemists where they can always be obtained; this could be stopped by a strong federation.

If chemists in any part of the kingdom are willing to join in this movement, and will communicate their willingness to me to do so, saying how much they would be inclined to invest in 1*l.* shares (limited) (5,000*l.* is wanted to make a big success), I will, if there is anything like support, take steps to have the matter put in hand without delay. (Enclose stamps for replies.)

I am, Sir, yours faithfully,
46 Waterworks Street, Hull. G. R. FOULSTON.

SIR,—Your ably-conducted journal testifies week by week that chemists are by no means satisfied with the present state of their trade. Much grumbling takes place by some, indifference by the majority, and some practical hints by a few. Chemists fail to profit by the changed circumstances of modern times. To-day all is centralisation and combination. Twenty years ago and less all was individualism. Medical men, lawyers, and artisans are in the main united and organised; hence, when necessary, are a power to be reckoned with. Where are chemists? There is but one thing on which they are united, and that is C.A.M.W.A.L., which is a gigantic success. Why cannot such a combination be formed for a Patent and Sundry House (Limited) with 1*l.* shares, and, as advocated by Mr. Cooper and Mr. Reid, put up our own proprietaries? And why cannot we establish a Wholesale Drug Company (Limited), also on co-operative principles? The sundry and drug houses are no friends of ours, otherwise they would never have supplied the drug-stores. Besides, the profits of the wholesale are so great that we should be able to compete with present and future cutters by buying small quantities at a greatly-reduced cost. Depend upon it this is our only remedy for our present condition. It needs a number of leading London chemists, or several country associations combined, to take the matter up at a meeting specially called for the occasion. We want more men like Mr. Park, and more associations like Plymouth and Bradford, with the powerful advice of THE CHEMIST AND DRUGGIST, and a shaking off of distrust and jealousy amongst each other. VERAX. (8/59).

The P.A.T.A.

SIR,—Kindly allow me space to inform Mr. Park that I never supply less than one gross of my preparation direct, as the trouble and expense of collecting small accounts is too great. I never worry chemists for orders, as I adopt the system of creating a demand for my goods and trust the up-to-date retailers to supply the same. I allow 25 per cent. discount off face-value, and as this is a free country I do not think manufacturers should dictate to retailers as to the manner in which they should conduct their businesses. My experience is this: if Mr. de Tompkyns Jones, the chemist, does not supply the British public with what it wants, then Brown, the grocer, does.

Mr. Park and his Plymouth brethren may fall on each other's necks in concocting the scheme suggested by him, but it will never work in practice, as there will be a loss of individuality, and the end will be that of the proverbial Kilkenny cats.

Manufacturers who insist upon face-value lose a valuable advertisement by their goods being omitted from cash lists issued by smart retailers.

In conclusion, may I ask Mr. Thompson, the President of the P.A.T. A., why he allows his 1*s.* 6*d.* "Alexandra" Feeders to be sold by stores at 1*s.* 1*d.*?

Yours truly,
RED DRAGON. (8/1).

The late Mr. Schacht.

SIR,—More than a quarter of a century has elapsed since Bristol mourned the passing away of her well-beloved physician John Addington Symonds and still is his name fresh in her memory as if it were but yesterday. And so shall it be for years to come that in like manner the recollection of George Frederick Schacht will be cherished. Hard were it indeed to find such another kindly, courteous gentleman.

Longfellow has told us in his beautiful "Psalm of Life" how we may

> Departing, leave behind us
> Footprints on the sands of Time.

This our dear departed friend has done, and we of his city who mourn his loss can only bow to the inevitable; for, Sir! we are proud to say we did more than honour, we loved him. Who could do otherwise who really knew him as he was?—a strong earnest worker for the public weal, striver for good, and scorner of the base. Yours truly,
Bristol. ALGERNON WARREN.

DISPENSING NOTES.

This section is intended for the elucidation of dispensing difficulties. Subscribers and their employés may contribute to it, criticising any of the subjoined notes, or contributing notes on prescriptions which they have found to be of unusual interest.

Does Digitoxin Spontaneously Change?

262/30. *D. W.* (Ghent) writes in regard to digitoxin as follows:—"Can you tell me why, during the past five or six weeks, the contents of a bottle of digitoxin, which has been in use for a year, gives patients colic and profuse vomiting? It never did before. I think the digitoxin has been altered in its chemical composition, as it is said to be rather unstable. Does it not? Can you tell me something thereabout? It would, if my supposition is right, be advisable for the chemist to renew his stock, and the producer to sell it in tubes of 0·1 gramme, it being very dear and used in very small quantities—viz., 4, 5, 6 mgr. It is with us always prescribed thus—

> Digitoxin —
> Aq. still. 60·0
> Chlorof.
> S.V.R., aa q.s. ad solut."

[This is a matter which we cannot explain, for, as far as we are aware, there is no evidence that digitoxin undergoes spontaneous decomposition.]

A Question of Colour, &c.

260/45. *Sussex* had the subjoined prescription to dispense, and he used Hewlett's preparation ("as ordered," he explains). Next morning the mixture was returned, with the message that it had previously been sent out of a bright pink colour by a prominent London drug-store. Which was right? is the question we have to answer. The prescription is—

> Liq. arsenicalis .. .. ʒj.
> Liq. bismuthi c. pepsin co. ad .. .. .. ℥iv.
> Sig.: A teaspoonful in water three times daily after meals.

[If the word "Hewlett" had followed the second item in the prescription, we would not hesitate to dispense "mist. pepsinæ co c. bismutho (Hewlett)," but failing that and the fact that "liq. bismuthi c. pepsin co." is prescribed we should hesitate to say that the London drug-store was wrong. What do subscribers and makers of such preparations say?]

A Quinine-mixture.

SIR,—A day or two ago the following prescription was handed to me:—

Quin. sulphatis	gr. xxiv.
Acid. nitric. dil.	℥iij.
Spt. æth. nit.	℥iij.
Spt. chlorof.	℥ij.
Potass. chlor.	℥ss.
Aq. camph. ad	℥vj.

After being dispensed (in the order written above) it immediately changed colour into a bright yellow, resembling tr. ferri perchlor. diluted with water. Can you please enlighten me as to what change took place, as I could detect no odour of chlorine, or any other perceptible odour apart from that of the chlorof. and the spt. æth. nit.

Yours truly,
PUZZLED. (257/58.)

[We shall be glad if a few dispensers will try this, and report. We have failed to exactly reproduce "Puzzled's" experience.]

Phenocoll and Piperazine in Mixtures.

SIR,—Phenocoll and piperazine should not be prescribed in doses larger than 4 gr. of each salt in an ounce of water, or precipitation of the base phenocoll will result; should larger doses be necessary, the addition of a tincture (preferably of orange) will allow of as much as 10 gr. of piperazine and 15 gr. of phenocoll in each ounce of water. Some care is also necessary in dispensing these useful remedies. Each salt should be dissolved in half the water, and then mixed. When water is added to the mixed salts they become insoluble. The cause of the precipitation is due to the fact that phenocoll hydrochloride is a comparatively weak combination of phenocoll and hydrochloric acid, and piperazine a fairly strong basic compound. These, when dispensed, cause double decomposition to take place, the free base being precipitated. Yours faithfully,

Hospital for Women, Soho Square, W., GEORGE ROE.
January 5.

[This note is supplementary to one printed last week, in which 10 gr. of each substance was prescribed in a half-ounce mixture, containing, however, glycerine. We found that it was quite clear when made up to 1 oz. with water. Mr. Roe has sent us specimens of mixtures which show his points admirably. One containing 5 gr. each of piperazine and phenocoll hydrochloride with 1 oz. of water gives a greater deposit than one containing 15 gr. of each, with tr. aurantii ʒj., and aq. ad ℥j.]

Lanoline Cream.

SIR,—Can any of your readers give a method for the correct dispensing of the following, so as to turn it out as a decent cream?—

Ac. carbol.	gr. xxx.
Lanolini	℥ss.
Aq. ad	℥iij.

M.S.A.

A similar cream was given at the last London examination. I have had numerous tries at it, and have had various suggestions, but none of them will give a cream which will not separate. Trusting that you will find space for it in your excellent journal, Yours truly,

PHARMACY. (8/37.)

260/19. *Virgil.*—**Spt. Valer. Aromat.**—Our opinion is that this is a slip for tr. valer. ammon.; nevertheless, we have tried to trace the name in all likely sources of information, and have failed.

3/25. *T. P.*—**Sal. Carolinum Factitium,** or artificial Carlsbad salts, 4 grammes, is the item in the prescription. The formula is—

	Parts
Dried Glauber's salt	22
Sulphate of potash	1
Sodium chloride	9
Sodium bicarbonate	18

Mix to form a fine powder.

This is the Ph.G. formula, and the powder made by it should be dispensed, as the prescription is a German one.

252/49. *Northern.*—**Inf. Rosæ Acid.** always becomes green with borax.

260/39. *Fair Charge.*—**Elixir Rhei,** B.P.C., ℥iij. was charged 10*d.* by a Malta chemist. "F. C." (who lives in a Kent town) charged 1*s.* 6*d.*, as he had to get it specially from London. We do not think that overmuch. Why did the Malta chemist take so little? Are things much cut there?

LEGAL QUERIES.

We do not give legal opinions by post. Information regarding most legal matters in connection with pharmacy will be found in THE CHEMISTS' AND DRUGGISTS' DIARY, *and in "Pharmacy and Poison Laws of the United Kingdom," and Alpe's "Handy-book of Medicine-stamp Duty."*

7/1. *A. E. C.*—It is legal for persons not on the register of chemists and druggists to trade as manufacturing chemists. It would not be legal for an unregistered person to use that designation deceptively to enable him to carry on the business of a retail chemist and druggist.

2/70. *Inquirer.*—The title "pink pills" cannot be the exclusive property of anybody. The Courts will, however, protect a person who has created a property in a certain title from such imitation of that title as may seem (to the Judge) calculated to deceive. See article in *C. & D.*, March 21, 1896.

263/1. *Hunts.*—You would hardly be so unwise as to attempt to make a settlement of property on your wife on such advice as we could give you in a paragraph. Deeds of settlement are fruitful sources of litigation, and should be drafted with the utmost care. Get the assistance of the best solicitor in your neighbourhood.

7/46. *W. F. B.*—Where a servant gives notice to leave, the time of the day at which the notice is given is immaterial with regard to the time at which it expires, and notice given at any time during business hours would expire at the end of the business day of the week or month for which it is given. For instance, if a week's notice is given on Saturday at 8 in the morning it would not expire until the end of business hours on the Saturday following, and the same with regard to a month's notice. We do not know of any case where this has been expressly laid down in so many words, but in cases with regard to wages it has always been held that if the servant leaves before the end of the week or month for which the wages are payable, he or she cannot recover for the broken time.

MISCELLANEOUS INQUIRIES.

Notice to Querists. *We reply to our subscribers and their employés only; queries must, therefore, be authenticated by the name and address of the subscriber. When more than one query is sent write each on a separate piece of paper. When a sample accompanies a query full particulars regarding the origin and use of the sample must be given, and the name of the querist should be placed on the sample. Queries are not replied to by post.*

246/45. *A Subscriber.*—**Infants' Food.**—Your sample is well malted, and seems to want in nothing except a little alkali and milk-sugar. To each pound of it add powdered milk-sugar ℥j., bicarbonate of soda ℈j., and common salt ℈j., previously well triturated together before mixing with the food. Your other queries are dealt with in another section.

240/7. *W. L. K.*—**Stucco-paint.**—We have examined your samples, but little is to be learned from them that would be of any practical value to you in compounding similar articles. They are not lead-paints, but both contain turpentine and linseed oil, combined with size, a barytes white, and, probably, aluminium oleate, the last-mentioned substance giving them the quality which distinguishes them from ordinary distempers.

246/13. *F. W. H.*—(1) **Headache-powders.**—Each of the two powders in the 1*d.* packet contains 5 gr. of acet

anilide. Directions: Put a powder on the tongue and wash it down with a draught of water or milk. Take the second powder in half an hour if required. (2) **Teething and Fever Powders:—**

Hydrarg. subchlor.	gr. ss.
Cretæ præcipitat.	gr. iss.
Pulv. glycyrrhizæ	gr. j.

Misce et divide in pulv. ij.

These to be put in a penny packet.

DIRECTIONS: For a child of 3 months to 9 months, one powder; above that age, one or occasionally two powders—to be given in a little water, jam, or treacle.

249/52. *Bedsores.*—**Powder for Bedsores.**—This is oxide of zinc flavoured with a trace of simple tincture of benzoin or benzoic acid—the latter more probably.

250/17. *J. S.*—**Liniment for Curbs and Splints.**—Try the following:—

Camphoræ	℥ss.
Ol. terebinth.	℥iij.

Solve et adde

Ol. lini	℥iij.
Liq. ammon. fort.	℥j.
S.V.M.	℥ss.
Aq.	℥j.

M.

You cannot, of course, use methylated spirit without the sanction of the Board of Inland Revenue.

250/58. *H. R. D.*—**Paraffin-oil Purifier.**—Our correspondent submits a sample of a purifier which he is no longer able to obtain. It is sold in sixpenny boxes, each containing about 1 oz. of the material—nice, bluish crystals. The following are extracts from the label:—"This purifier renders the oil non-explosive, free from smell and smoke, and increases the light 50 per cent., makes the flame equal to electric light for whiteness, and effects a saving of oil, as so much wick is not exposed to the flame. Also used in cooking, heating, and other oil-stoves, bicycle-lamps, &c. Directions for use.—Place the contents of the box in the lamp or stove and shake well around when replenishing with oil. It will last one lamp or stove six months." The only point which our correspondent criticises is the last statement. He says, "Although the purifier answers well for the time, it wastes in a couple of days." We find the "purifier" to be nothing else than common salt in medium size crystals, the salt being dipped in a solution of methyl blue to tint it, or the solution (spirituous preferably) sprinkled upon the crystals.

252/23. *Bovis.*—**Sausage-flavouring.**—The following should give you a powder very like your sample:—

Powdered celery-seed	ʒij.
Powdered mace	ʒj.
Powdered nutmeg	ʒj.
Powdered black pepper	℥ij.
Powdered common salt	℥ij.
Ground rice	℥vj.

Mix well, tinting the powder a dark salmon colour by means of finely powdered red sanderswood.

252/80. *B. & S.*—**Remedy for Asthma in Cage-birds.**—A few drops of this is put in the drinking-water. The following will give something like it:—

Ol. menth. pip.	ʒj.
Ol. eucalypti	♏vij.

Mix and colour with chlorophyll.

253/29. *Glendower.*—(1) **Foam-liquid.**—The sample is a decoction of quillaia (1 in 8) preserved with spirit 4 oz. to the pint. (2) **Ointment to Remove Small-pox Marks.** Our correspondent submits the following:—

Bism. subnit	℥iss.
Pulv. silicæ	℥j ¼.
Calc. fluoriti	℈j.
Adipis	℥j ¾.
Cetacei	℥j ¼.
Ol. olivæ	℥ss.

Ft. ung.

Rub once a day.

This is much too hard. Use 2½ oz. of lard and ½ oz. of spermaceti only. The ointment, we may add for the benefit of other subscribers, is used in conjunction with the following lotion:—

Liq. ammoniæ	ʒi.
Glycerini	℥ij.
Aq. ad	℥vj.

M.

To be used every morning.

236/62. *Suffolk.*—**Brick-glazes.**—We notice a number of formulas for these in the Atlas Chemical Company's book published at 21*s*. We must refer you to the book for them.

246 51. *Fruit* (N.S.W.).—**Tin-lacquer.**—The best preparations are those made with spirit, as aniline colours can be combined with them more readily than with turpentine varnishes. We give you formulas for both, however:—

	Oz.
Seedlac	3
Yellow resin	1
Spirit	20

Dissolve and strain.

	Oz.
Yellow resin	2
Gamboge	4
Oil of turpentine	32

Dissolve and strain; and get the desired brass-colour by adding a sufficiency of solution of dragon's-blood in turpentine (1 in 6).

243/39. *Chemicus.*—**Lavender-coloured Smelling-salts.**—Solutions of phenylene-blue and methylene-blue added to alcoholic ammonia give the lavender or violet colour desired. We presume this is what you want. Aniline-orange and the blue give a nice shade of green.

260 65. *R. & S.*—**Tr. Iridis Flor. and Ess. Iridis** are synonymous. You will find the formula in the *C. & D.* DIARY, 1895. The strength is 5 oz. to the pint.

261/37. *Torquay.*—**Emery-cakes** are made by binding emery-powder with the smallest possible quantity of melted wax, and moulding into cakes.

261 53. *Cyclist.*—**Billiard-cue Cement.**—Soak 1 oz. of the best Russian isinglass in 1 oz. of water, and when the whole of the water is absorbed pass the isinglass through a sieve to keep back the fibrous matter. Put the siftings into a gallipot, which place in hot water, and add ½ oz. of glacial acetic acid and ½ oz. of water. Heat and stir until dissolved, restoring the weight to 3 oz.

262/52. *Polish.*—(1) **Pills for Gravel:—**

Pulv. digitalis	gr. vj.
Pil. hydrarg.	gr. xij.
Pil. scillæ co.	ʒss.

Fiat mass. et divide in pil. xij.

DOSE.—One thrice daily with half a tumblerful of warm water.

(2) **Ink for Marking Sacks.**—Tar and benzol of each equal parts, mixed and strained, or a solution of black sealing-wax in methylated spirit.

262/18. *Easton.*—**Liquor Eastoni.**—The DIARY formula should read as follows:—

Iron wire	ʒiiss.
Phosphoric acid, s.g. 1·5	℥j. ʒvj.
Water	℥iij.

Dilute the acid with the water in a flask, add the wire, and heat gently until dissolved; add hypophosphorous acid ½ dr., strain at once and add to—

Powdered strychnine	gr. x.
Phosphate of quinine	ʒiv.
Water	℥iij.

Dissolve, filter, and wash the filter with water to make the filtrate measure 10 oz.

Even 1½ oz. of the phosphoric acid suffices, and as one goes under and above that quantity the tendency for the quinine to crystallise increases. Your plan is to make another quantity, treating the iron wire with ½ oz. of acid and 3 oz. water until action ceases; then add 2 oz. of the liquor which you have made. Do not heat further, but filter when effervescence stops, add quinine and strychnine, the rest of the liquor, shake well to dissolve, make up to 1 pint, and filter.

255/31. *W. T.*—**Boot-sole Finisher.**—Your sample is the same as was reported upon in our issue of August 31, 1895, page 365.

257/24. *Scrutator.*—(1) **Epilepsy-mixture.**—A sample is submitted of the mixture sold at about 1*s.* per oz. by a man who advertises largely. It is a pink mixture, and the dose is one or more teaspoonfuls, according to age. We find each drachm of the mixture to contain 15 gr. of sodium and potassium bromides. The colouring appears to be magenta. (2) Boric acid would be the best addition to the skin-cream.

257/70. *C. I.*—**Camphor Ice.**—Your sample is made with colourless petroleum oil (heavy) and hard paraffin. Try the following formula, adjusting the paraffin to get the proper consistency, as it varies in melting-point:—

Hard paraffin	℥v.
White mineral oil	℥xx.

Melt the paraffin, add the oil, continuing the heat until clear, then add—

Flowers of camphor	℥ij.

Stir until dissolved, then pour into boxes standing on a cold slab.

This should not cost you above 6*d.* or 7*d.* per lb.

258/56. *Shellac.*—**White French Polish:**—

Bleached shellac	℥ij.
Sandarac	℥ss.
Gum thus	℥ss.
Spirit..	℥xx.

Dissolve, and set aside to settle; then decant through a strainer.

258/64. *Nelson.*—(1) **Baking-powder Formulæ.**—See vol. xlix., pages 262 and 763. (2) **Glycerine and Cucumber.**—See *C. & D.*, March 28, 1896, page 473.

258/67. *P. White.*—**Chewing-gum:**—

Gum Chicle	3½ lbs.
Hard paraffin	1 lb.
Tolu balsam	2 oz.
Peruvian balsam	1 oz.

Dissolve the gum in as much water as it will take up, melt the paraffin and mix with it the gum and balsams. Separately make a sugar-boiling of the following in the ordinary manner:—

Granulated sugar	10 lbs.
Glucose	4 lbs.
Water	50 oz.

When this is of the proper "crack" pour it on the slab, and mix with it enough of the Chicle mixture to make it tough. Flavour as desired.

259/57. *J. B.*—**Anti-fouling Composition.**—White arsenic is one of the best additions to ordinary paints for preventing fungoid growths. Use 10 lbs. for each hundred-weight of paint. Like most other preventives, it fails after a time, probably because most of it is dissolved out by the sea-water.

262/56. *Singapore.*—We have received yours of December 1, and duly noted the contents.

252/19. *S. C. N.* (Sherbrooke).—Up to the present we have not received the sample which you sent.

216/26. *J. V.*—**Are Raisins Bleached by Sulphur Vapour?**—It is possible, but we cannot vouch for it. Does any subscriber know?

3/25. *T. P.*—The **Russian Cancer Remedy.**—*Chelidonium majus*, or celandine, has long been used by herbalists in this country, and Dr. Denisenko's alleged discovery that the juice of the plant cures cancer is not a surprise to herbalists. The following is what the "Botanic Pharmacopœia" says of the drug:—"Celandine is alterative, diaphoretic, diuretic, and a strong cathartic. It is used in jaundice with good results, and is also serviceable in eczematous affections. In the treatment of the worst forms of scurvy, it has, at different times, attracted considerable attention, having been given with asserted benefit. It seems from some cause, however, to have fallen lately into comparative disuse. The properties of a vulnerary have been attributed to it, and, as such, it is yet, in some districts, in repute in popular practice. The infusion is of some value as an external application in soreness of the eyes and defects of vision. The juice of the plant, which is acrid, and unsuitable for internal employment, is usefully applied to the removal of corns and warts, care being taken in its application that the juice is not allowed to touch or remain upon the hands or adjoining surfaces. It is applied to the substance desired to be removed once in twenty-four hours. An ointment is prepared from the leaves and flowers, and forms a suitable external application for piles." The drug was formerly one of the ingredients in an Edinburgh Pharmacopœia decoction, and the dried and fresh root, extract and juice were given internally for scrofulous affections. The dose of the juice is 5 to 10 drops gradually increased. We notice that Mr. Martindale, 10 New Cavendish Street, W., has obtained *Succus chelidonii* by pressing the fresh plant. The juice is a dark-coloured liquid, miscible with water, and the taste, although not agreeable, cannot be described as nauseous. It contains the active principles of the plant, among them two alkaloids (chelidonine and chelerythrine), the latter being the acrid poison. It is identical with sanguinarine, an alkaloid obtained from blood-root. We think the Russian report much too sanguine.

262/1. *Hunts.*—**Cough-mixture.**—We think the large quantity of spirit in your mixture is unnecessary as the camphor and oil of anise are not in excess of what the other liquids in the mixture should take up. Proceed as follows: Dissolve the benzoic acid, camphor, and oil of anise in 2 pints of rectified spirit. Mix 2 pints of glycerine and the tartar emetic with 7½ gallons of water, and add the spirituous solution gradually, stirring constantly. When half of it is poured in begin to add the oxymel in such quantity that both it and the spirituous solution will be used up at the same time. Now add the other ingredients, cover the vessel well, and allow to settle for a few days; then skim and decant.

262/68. *R. S.*—**Chlorodyne** (DIARY, page 266).—A "v" has been omitted, as you can easily find on reckoning out the quantities. This was explained a month ago.

262/23. *R. M.*—**Fireproof Fabrics.**—Tungstate of soda is by no means universally successful. You cannot do better than read the special notes on the matter in the *C. & D.* of May 30, 1896, page 772.

263/46. *A New Subscriber.*—**Wood-stains.**—*Oak*:—Vandyke brown, 2½ oz.; carbonate of ammonia, 1 oz.; bichromate of potassium, ½ oz.; carbonate of soda, ½ oz.; water, 40 oz. Boil for about ten minutes. *Mahogany*:—Logwood, 3 oz.; water, 14 oz. Boil for ten minutes, replacing lost water; filter, and add chloride of barium, ¾ oz. *Walnut*:—Permanganate of potash, 3 oz.; water, 1 gallon. Dissolve. —*Rosewood*:—Red sanderswood, 2 lbs.; carbonate of soda, 2 oz.; boiling water, 4 pints. Macerate for a week, and filter. To be applied hot.

263/16. *Embrocation.*—**Dried Moss for Window-decoration** is sold by florists and seedsmen in most large towns. If you cannot get it locally, Messrs. Schutze & Co., Aldersgate Street, E.C., may supply you.

1/23. *Wilts.*—(1) **Emery Wheels** are made by mixing powdered emery with half its weight of Stourbridge loam and sufficient water to mass it. It is then cast into the shape desired by means of a powerful hydraulic press. (2) We are not aware of any means of getting hæmatite in small quantities; it is the iron ore most used in West of Scotland iron-smelting works.

1/52. *C. F. Hardie.*—**Malt and Iron.**—See the DIARY, page 272.

1/65. *Ad Rem.*—**Antiseptic Solution for Catheters.**—Chinosol, 2 gr. to the ounce of water, but all watery antiseptics will in time blister the gum.

1/30. *W. B.*—**Ticket-inks.**—*White*: Zinc white (*i.e.*, finely levigated zinc oxide) ʒij., chloroform-water ʒvj., acacia mucilage ʒij. *Red*: Use vermilion, or any other red pigment, instead of the zinc white.

5/44. *Toris.*—(1) **Suppositories.**—The only thing that the addition of olive oil to cocoa-butter does is to make it ointment-like. (2) Quinine hydrochloride is used, not sulphate.

258/35. *Kaolin.*—**Books on Malting and Distilling.**—Wright's "Handbook for Young Brewers" (Crosby Lockwood, 3*s.* 6*d.*) and the work on brewing and distilling in Churchill's technological series (6*s.* 6*d.*). The address is Whittaker & Co., 2 White Hart Street, E.C.

238/56. *Dane* (N.S.W.).—The following are the quantities omitted from your copy of the *C. & D.*, August 22, 1896, pages 328 and 330:—Gum thus, 2 oz.; treacle, lb. j.; powdered resin, ½ lb.; black tea, 2 oz.; ess. zingib. sol. 4 oz.; pulv. ext. glycyrrh. sic., ½ oz. Thanks for your suggestion, which we have noted, but we have difficulty in getting into the DIARY all that we should like.

253/49. *J. S.*—**Stains for Electric Lamps.**—Solutions of aniline colours, to which 10 per cent. of soluble glass has been added. We can never guarantee insertion of replies "in this week's issue" (although we try), as the space available for correspondence depends upon the news, &c., which must be disposed of week by week.

253/33. *Agricola.* — **Calf-food.** — To the calf-meal, "V.C.P.," page 280, add a portion of any of the cattle-spices given on the same page. See also *C. & D.*, xlix., page 327.

187/25. *Benzon.*—**Books on Vinegar-brewing.**—"Acetic Acid and Vinegar, Ammonia and Alum" (J. & A. Churchill, 5*s.*); "Practical Treatise on the Manufacture of Vinegar and Acetates, &c.," by W. T. Brannt (Sampson Low, 25*s.*).

248/1. *G. B. P.*—**The Specimen** which you send resembles blood-root in some respects, but differs in others. We cannot say positively what it is, having failed to find a museum specimen like it. If we had several ounces of it in unbroken roots we might be able to name it.

INFORMATION SUPPLIED.

Subjoined are notes and formulæ received from subscribers. Similar information is always welcome.

256/12. **Horse Tice.**—

2*d.* horse tincture (of myrrh comp.)
2*d.* arnhorea (arnica tinct.)
2*d.* halder (oil) (ol sambuc. vir.)

I have had the same recipe myself.—W. W. (6/26).

2*d.* horse stinehor = horse tincture (tr. benzoin. co.)
2*d.* arnhor = amber (ol. succini rect.)
2*d.* halder = elder (ol. sambuci virid.)

J. B. BENNETT.

2*d.* horse tincture (tr. myrrhæ nig. or tr. benz. co.)
2*d.* hartshorn.
2*d.* elder (green oil of elder)

I thought at first that the second one was "arnica," but dismissed the idea, as hartshorn would be a much more familiar remedy to the horsey fraternity.

A. F. HICKS.

INFORMATION WANTED.

The Editor will be obliged for replies to the following from any who can furnish the information.

261/56. English agents for Alocos Insufflator.

1/23. Who can supply hæmatite in small quantities?

246/45. Cooked flour and biscuit-flour; where obtainable?

246/45. Soluble infants'-food in bulk; where obtainable?

246/13. White tripoli; where obtainable?

262/64. Concentrated food for horses: is this obtainable?

5/7. Who are makers of vulcanite and metal sprays?

5/18. Address of Messrs. Smith, packers of chloride of lime in tins.

Coming Events.

Notices of Association and Society Meetings will be inserted in this section free of charge if we receive intimation of such meetings by Wednesday of the week previous to that in which the meetings are to be held.

Monday, January 11.

Notts and Nottingham Chemists' Association. Opening of Practical-dispensing Class at University College, 8.30 to 10 P.M. Teachers, Messrs. Eberlin and Turton.

Tuesday, January 12.

Glasgow meeting of the *Proprietary Articles Trade Association*, Religious Institution, 200 Buchanan Street, Glasgow, at 11 A.M. Mr. Robert McAdam will preside, and Mr. Glyn-Jones will start the discussion.

Midland Pharmaceutical Association, Mason College, Birmingham, at 8.30 P.M. Mr. Liverseege on the "Report of the Select Parliamentary Committee on the Adulteration of Drugs."

Royal Photographic Society. Ordinary meeting, 12 Hanover Square, at 8 P.M. "Photography by the Röntgen Rays, Up to Date," by Dr. Hall-Edwards, L.R.C.P.

Notts and Nottingham Chemists' Association. Opening of Botany Class at University College, 8 to 9.30 P.M. Teachers, Professor Carr and Mr. E. A. Smith.

Dumfries and District. A meeting of the trade in reference to the objects of the Proprietary Articles Trade Association has been arranged, when Mr. Glyn-Jones will lead off the discussion. Mr. William Allen will take the chair at 8.15 P.M. [Mr. Allen will inform anyone who wishes to attend the meeting where it will be held.]

Wednesday, January 13.

Pharmaceutical Society of Great Britain, 16 Bloomsbury Square, W.C. Council meeting at 11 A.M.

Pharmaceutical Society of Ireland, 67 Lower Mount Street, Dublin. Council meeting at 3 P.M.

Society of Public Analysts. Annual meeting, Chemical Society's Rooms, Burlington House, Piccadilly, at 5 P.M. Dr. Thomas Stevenson, the retiring President, will deliver his annual address. The following papers will be read:—"Some Analyses of Water from an Oyster-fishery," "Note on Weighing Out Fats," "Remarks on Formaldehyde," by Chas. E. Cassal; "A Specific-gravity Pipette," by W. F. Keating Stock; "A Modified Schmidt Process," by R. W. Woosnam.

Sunderland Chemists' Association, Grand Hotel, Bridge Street, Sunderland, at 7 P.M. Meeting in connection with the Proprietary Articles Trade Association, Mr. John Harrison (Vice-President of the Pharmaceutical Society) in the Chair.

Manchester Pharmaceutical Association, Memorial Hall, Albert Square, at 8 P.M. Lantern-lecture by Mr. W. L. Howie, on "From Mont Blanc to the Matterhorn." (Tickets, to admit "self and lady," may be obtained by anyone connected with the trade from Mr. Blackburn, 7 Exchange Street, or Mr. Lane, Victoria Bridge.)

Thursday, January 14.

Chemists' Assistants' Association, 103 Great Russell Street, W.C., at 9 P.M. Musical and social.

Liverpool Pharmaceutical Students' Association. Annual dinner.

Friday, January 15.

Edinburgh Chemists', Assistants', and Apprentices' Association, 36 York Place, Edinburgh, at 9.15 P.M. Open meeting, the arrangements by Mr. William Duncan. Papers:—"Chloroform Water," by Mr. Peter Boa; "An Adulteration of Pimento," by Mr. C. A. Macpherson; "Belladonna Plasters," by Mr. J. Rutherford Hill; "Answers to Queries," by Mr. William Duncan.

Aberdeen Junior Chemists' Association, 21 Bridge Street, Aberdeen, at 9.30 P.M. "Questions."

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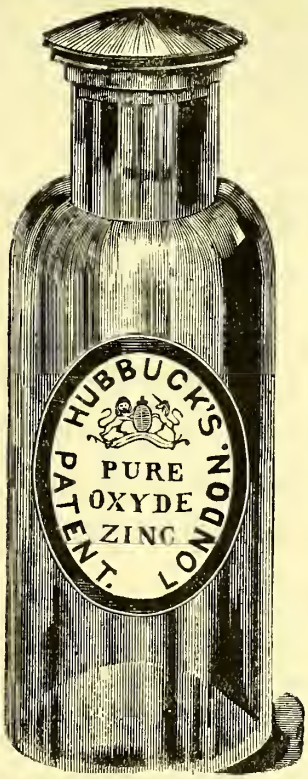

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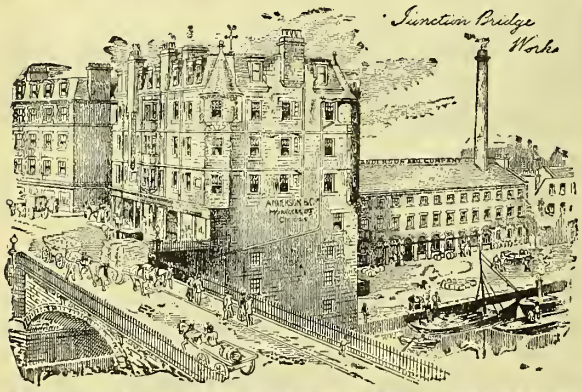

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„ 5.	„ „ et Hyoscy., P.B.		1/-	11*d.*
„ 8.	„ Ipecac. et Scillæ, P.B. ...		6*d.*	5*d.*
„ 10.	„ Rhæi Co., P.B.		5*d.*	4*d*

BLAUD'S c. ARSENIC.

„ 140.	Pil Blaudii	gr. v.		
	Acid. Arseniosi	„ 1/50	5*d.*	4*d.*
„ 141.	Pil. Blaudii	„ v.		
	Acid. Arseniosi	„ 1/100	5*d.*	4*d.*
„ 142.	Pil Blaudii	„ v.		
	Ferri Arsenias	„ 1/36	5*d.*	4*d.*
„ 143.	Pil Blaudii	„ v.		
	Ferri Arsenias	„ 1/50	5*d.*	4*d*

DANDELION PILLS.

			10-gross lots.	100 gross lots.
No. 272.	Ext. Taraxaci			
	„ Anthem			
	Pulv. Rhei	aa gr. i.		
	„ Aloes Barb.			
	„ Zingib.	aa „ ss	6*d.*	5*d*
	Ol. Carui	„ ¼		

TIC PILLS.

„ 208.	Quineti			
	Ferri Sulph.	aa gr. ss		
	Ext. Belladon.	„ ¼		
	„ Colchici Acet.	„ ss		
	„ Hyoscyami			
	Camphoræ	aa „ i.	1/-	11*d.*

TONIC PILLS.

„ 131.	Ferri Sulph.	gr. i.		
	Ext. Gentianæ	„ iii.	5*d.*	4*d.*

PENNYROYAL PILLS.

„ 247.	Ol. Pulegii	gtt. ⅛		
	Pil. Aloes et Ferri	gr. iv.	6*d.*	5*d.*

QUININE PILLS.

„ 250.	Quininæ Sulph.	gr. i.	8*d.*	7*d.*
„ 251.	„ „	gr. ij.	1/2	1/-

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„ 242.	Potass. Permang.	gr. i.	6*d.*	5*d.*
„ 243.	. „	ij.	9*d.*	8*d.*

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Bals. Copaibæ, min. 10	8/6	per 1,000;	in boxes containing	36,	5/6 per doz.
Blaud's = two pills.	13/-	„	„ „	30,	7/3 „
Cascara Sagrada = ½ drachm Liq. Ext.	12/6	„	„ „	30,	7/3 „
Compound Senegæ	14/-	„	„ „	24,	7/3 „
Copaibæ Cubebæ and Santal	22 -	„	„ „	36,	12 - „
Creasote, min. 1	8 6	„	„ „	36,	5 6 „
„ „ 2	11/-	„	„ „	36,	6 6 „
Guaiacol, „ 1	12/6	„	„ „	36,	8/6 „
„ „ 2	14/-	„	„ „	36,	10/6 „
Ol Santal Flav., min. 10 (English warranted)...	32/-	„	„ „	24,	12/- „

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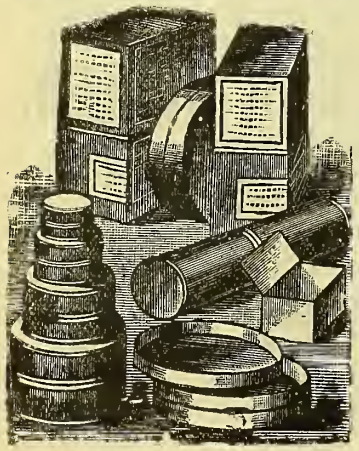

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MALT EXTRACT	6/-	10/6	19/-	per doz.
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WHITE MOULDED PHIALS, plain or graduated Teaspoons—

½ oz.	3/6 per gross.	1½ oz.	4/6 per gross.
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3.	Thick ,, ,, ,, ,, ..	6	2¼	4/-
1B.	Thin, for leg below knee	10½	3	5/6
1A.	Thick ,, ,, ...	10½	3	7/6
8.	Thin, for leg and knee	14	3	7/6
7.	Thick ,, ,, ...	14	3	9/6
9B.	Thin, for leg and thigh	21	3	10/6
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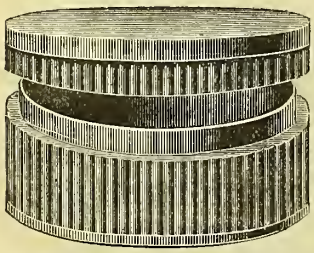

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5/6	6/-	6/6	7/6	8/6	9/-	9/6	11/- per gross.

This series is stocked in Pale Blue Glass only, but can be made to order in quantities of not less than 5 gross in White Flint, Amber, or Dark Blue.

MALT EXTRACT BOTTLES (Amber and Vegetable Green).

Fluid Capacity 5	6¼	8	10	12	16	20 oz.
10/-	11/6	13/6	15/6	17/6	19/-	21/- per gross.

COD-LIVER OIL BOTTLES.

	1	1¼	2	3	4	5	6	8	10	12	16	20 oz.	
Pale Blue	3/6	4/-	4/6	5/3	6/-	7/-	7/-	8/6	11/-	12/6	16/-	18/-	per gross.
White Flint	3/6	4/-	4/9	5/9	6/6	7/6	7/6	9/-	12/6	13/-	18/-	21/-	,,
Actinic Green ...	3/6	4/-	4/9	5/9	6/6	7/6	7/6	9/-	12/6	13/-	18/-	21/-	..

Can be made in Amber especially to order in not less than 5-gross lots.

SCREW CAP WIDE MOUTH ROUNDS.

(Suitable for Vaseline and other Preparations.) White Flint, Turquoise, White Opal.

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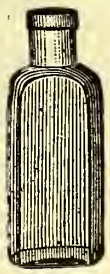
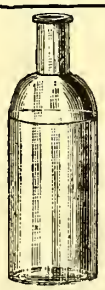


Malt Extract.



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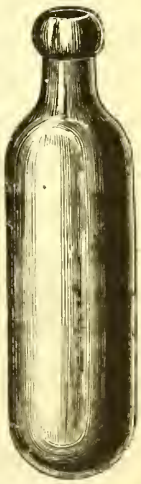

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With 16 grains Hypophosphites of Lime and Soda in each ounce.
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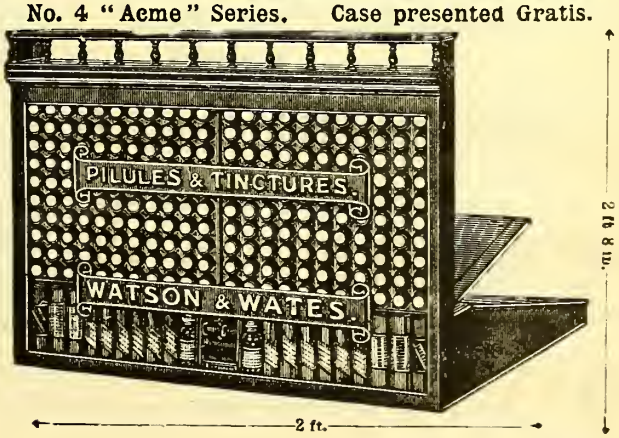

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Ferromangan - Peptonate Dieterich

SWEETENED (0·6 per cent. Fe and 0·1 per cent. Mn).

Professor Dr. ESCHERICH, Graz, in his article on pernicious anæmia, *Wiener klin. Wochenschrift* (clinical weekly journal, Vienna), 1892, No. 13 and 14, quotes the following case:—

Miss J. List, aged 14, lives under very unfavourable conditions, is overworked, and has not yet menstruated; exhibits great pallor of face, lassitude, nausea; has no appetite yet shows an inclination to eat such substances as chalk, paper, &c., &c. On admission to the Hospital on October 28 the patient shows typical signs of acute chlorosis; extreme pallor of face and of the mucous membranes, lassitude and great muscular weakness, Microscopical examination of the blood reveals high-grade pallor and a considerable divergence in the size of the red blood-corpuscles:—

Number of red blood-corpuscles, 2,505,000; number of white blood-corpuscles, 7,000; relation of white to red, as 1 : 350.
Showing Hæmoglobin (Hb), according to Fleischl, equal to 15 per cent.

Given the normal number of erythrocytes in this case to be five millions, calculation shows a diminution of Hb to 15 per cent. to a loss of only 50 per cent. of blood-corpuscles of the size of 8·4 $\mu\mu$, or to about a third of the normal.

Graeber, in his hæmatological researches, states, with great force and lucidity, that in typical chlorosis the number of blood-corpuscles be not at all, or only to a very small extent, diminished, but their shape and size be greatly altered, and especially their colouring power be enormously reduced. Although further clinical investigations prove that Graeber's statement cannot be upheld in its full force in all cases, yet we can in some forms of anæmia but adhere to his clear and precise definition. The case of this girl List is not one of simple chlorosis (it is rather a case of anæmia supervening on chlorosis), yet it indicates a characteristic diminution of Hæmoglobin in every blood-corpuscle, and this is the more apparent as a comparison of the condition of the blood in pernicious anæmia, where the number of 715,600 erythrocytes show almost the same colouring power per c.mm. as the 2,505,000 as shown above.

This case, moreover, showed in its further development the peculiarity (said by Graeber to be characteristic in chlorosis) that during a course of iron medication (in this instance Liq. Ferro-mangani Saccharati Dieterich-Helfenberg) the number of red blood-corpuscles was not materially augmented, but that the amount of Hæmoglobin was quickly and steadily increased. Six days after admission to the Hospital, and of giving Liq. Ferro-mangani Saccharati Dieterich-Helfenberg, a second examination of the blood of this patient was made, and it was shown that the

Number of red corpuscles was 2,887,000; and that of white corpuscles, 6,000; relation of red to white, as 1 : 388.
Hæmoglobin (Hb) equal to 35 per cent.

These figures show that whereas the Hæmoglobin had increased by 20 per cent., that of the blood-corpuscles had only increased by 7 per cent.

On being discharged from the Hospital on December 6 patient showed almost a normal amount of blood-corpuscles and 60 per cent. of Hæmoglobin.

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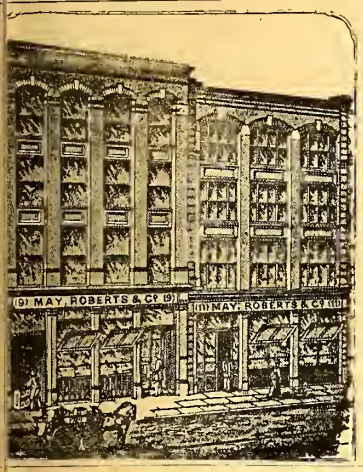

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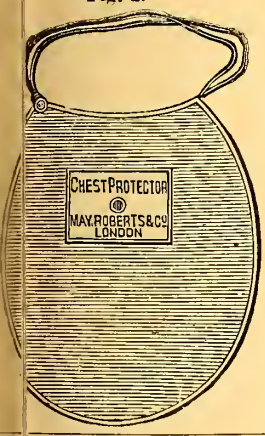
Fig. 1.



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Nos.	0	1	2	3	4	5
Size	$8\frac{1}{2} \times 7\frac{1}{4}$	$9\frac{1}{2} \times 8\frac{1}{4}$	$10\frac{3}{4} \times 9\frac{3}{4}$	$11\frac{3}{4} \times 10\frac{3}{4}$	$13\frac{1}{2} \times 12$	$15\frac{1}{2} \times 14$ in.
Per doz.	4/9	6/–	7/9	9/3	12/–	16/6

Flannel, as Fig. 1, lined with Chamois Leather—

Nos.	0	1	2	3	4	5
Size	$8\frac{1}{2} \times 7\frac{1}{4}$	$9\frac{1}{2} \times 8\frac{1}{4}$	$10\frac{3}{4} \times 9\frac{3}{4}$	$11\frac{3}{4} \times 10\frac{3}{4}$	$13\frac{1}{2} \times 12$	$15\frac{3}{4} \times 13\frac{3}{4}$ in.
Per doz.	4/6	5/6	8/9	11/–	14/–	18/–

Fig. 2.

Chest Protectors.

Felt, as Fig. 2, double, for the Chest and Back, Scarlet or Grey (Natural Wool), *Best Quality*—

Nos.	1	2	3	4	5
Size	11×8	$12 \times 9\frac{1}{2}$	$13\frac{1}{4} \times 10\frac{1}{2}$	$15 \times 11\frac{1}{2}$	$16\frac{1}{2} \times 14$ in.
Per doz.	15/–	18/–	22/–	28/–	36/–

Flannel, as Fig. 2, for Chest and Back, lined with Chamois Leather—

Nos.	1	2	3	4	5
Size	$9\frac{1}{2} \times 8$	$11\frac{1}{4} \times 9\frac{1}{2}$	13×11	$14\frac{3}{4} \times 12\frac{1}{2}$	$16\frac{1}{4} \times 14$ in.
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4-quart ...	2/2	,,

Fig 1

Indiarubber Water Bags

For the Chest, Feet, or Stomach, Fig. 1—

	Inches.	Each.		Each extra.
Plain,	10×8	... 3/9	Scarlet Covers	... 10*d.*
,,	12×6	... 3/5	,,	... 10*d.*
,,	12×8	... 4/6	,,	... 11*d.*
,,	12×10	... 5/–	,,	... 1/1
,,	14×8	... 5/–	,,	... 1/1
,,	14×10	... 5/9	,,	... 1/2
,,	16×12	... 7/6	,,	... 1/7

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Printed by SPOTTISWOODE & Co., New-street Square; and Published at the Office, 42 Cannon Street, in the City of London.—*January* 9, 1897.